

Light Attenuation in the Experimental Lakes Area — 1983, 1984, 1985 Data

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TO/A

Data Report No.629

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Canadian Data Report of
Fisheries and Aquatic Sciences 629

April 1987

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LAKES AREA - 1983, 1984, 1985 DATA

by

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ABSTRACT

Shearer, J.A., and E.R. DeBruyn. 1987. Light attenuation in the Experimental Lakes Area - 1983, 1984, 1985 data. Can. Data Rep. Fish. Aquat. Sci. 629: iv + 149 p.

Periodic measurements of photosynthetically active radiation depth profiles were taken in a number of lakes in the Experimental Lakes Area, northwestern Ontario, over a three year period from 1983 through 1985. Measurements were taken during the ice free season only. The collected data are tabulated and plots of irradiance versus depth are presented. Mean vertical attenuation coefficients and percent transmission at depth have been calculated.

Key words: light penetration; water transparency; limnological data.

RÉSUMÉ

Shearer, J.A., and E.R. DeBruyn. 1987. Light attenuation in the Experimental Lakes Area - 1983, 1984, 1985 data. Can. Data Rep. Fish. Aquat. Sci. 629: iv + 149 p.

Les profils de profondeur du rayonnement photosynthétiquement utilisable ont été mesurés de façon périodique pendant trois ans, de 1983 à 1985, dans un certain nombre de lacs du Région des Lacs Expérimentaux, dans le nord-ouest ontarien, au cours de l'inter-glaciel. Les données recueillies ont été groupées en tableaux et l'éclairement a été figuré par rapport à la profondeur. À partir de ces données, les coefficients moyens d'atténuation verticale et le pourcentage de transmission ont été calculés.

Mots-clés: pénétration de la lumière; transparence de l'eau; données limnologiques.

INTRODUCTION

This report presents solar irradiance at depth data collected over a three year period for selected lakes within the Experimental Lakes Area (ELA), northwestern Ontario (Johnson and Vallentyne 1971). These data were collected in conjunction with, and in support of, phytoplankton productivity studies conducted on the same lakes during the same years (DeBruyn et al., unpublished data).

The measured irradiances represent the quantum flux density in the 400-700 nanometer waveband and can be defined as photosynthetically active radiation (PAR).

The content of this report supplements that found in nine previous reports of this series (Appendix 3). The methodology for data collection is briefly described and the data are presented in graphical and tabular form.

DATA COLLECTION AND ANALYSIS

The vertical attenuation of downwelling PAR was monitored during the ice-free season in 22 lake basins during 1983, 26 lake basins during 1984 and 23 lake basins during 1985. These lakes range in size from 1.3 to 509 hectares and in maximum depth from 1.0 to 52 metres. In each lake studied, vertical light attenuation profiles were taken at the deepest location.

Light attenuation surveys were conducted either every two weeks or monthly. Generally, experimentally perturbed lake basins (see below) were surveyed more frequently than the reference lake basins. The identification numbers of the lakes studied in each year are listed below.

1983		
109	227	375
110	239	382B
114	240	382
222	302N	622
223	302S	623
224	305	629
226N	373	
226S	374	
1984		
93	226N	305
109	226S	373
110	227	374
111	239	375
114	240	382B
222	302N	382
223	302S	623
224	303	629
225	304	

1985

109	226N	303
110	226S	304
114	227	305
221	239	373
222	240	374
223	260	382
224	302N	623
225	302S	

During 1983, each of lakes 302, 226 and 382 was divided (with a reinforced plastic "sea curtain" (Schindler 1975; Cruikshank et al. 1983)) into separate basins for whole basin comparative perturbation studies. On July 11, 1984 the curtain dividing Lake 226 was removed to allow the water from the two basins to mix. However, each basin was studied separately through 1985. Lakes 302 and 382 remained divided through 1985. Lake 382 Bay was not studied in 1985 because of the deteriorated condition of the "sea curtain".

Lakes 114, 302S and 223 were undergoing controlled acidification with H_2SO_4 (Schindler et al. 1980; Cruikshank 1984). Lake 302N was undergoing a similar controlled acidification with HNO_3 (Turner et al. 1987). Lake 227 was being artificially enriched with nitrogen and phosphorus as part of a long term eutrophication experiment started in 1969 (Schindler et al. 1971). From mid-July through October 1984, Lake 303 was artificially enriched as part of a bait-fish enhancement study (Mohr 1986).

Profiling techniques and equipment were unchanged throughout the study period and are described in detail elsewhere (Shearer et al. 1985; Appendix 3). Profiles were measured with either a Licor LI-192S, underwater quantum sensor and a LI-185 meter or a LI-192B sensor and a LI-188 meter. Whenever possible, profiles were measured near mid-morning and mid-afternoon (Combs 1977) and under clear or uniformly overcast skies.

Surface readings were taken in air and corrected for sensor immersion effect. The immersion-corrected, surface irradiance value serves as the surface reference (100 percent) to which the remaining underwater percentages for the profile refer.

The measured light profiles included in this report are presented in two formats. Appendix 1 lists the measured values of irradiance versus depth. These irradiances have been converted to percentages of the coincident surface irradiance. Appendix 2 shows the calculated 60, 30, 10, 3, and 0.5 percent light isopleths at their respective depth intercepts for each lake year.

ACKNOWLEDGMENTS

We greatly appreciated the assistance of Kimberley Hallard in the collection and computer entry of data. We also thank Susan Kasian for her assistance with inter-computer data transfers and David Gilbertson for graphing data.

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APPENDIX 1

This appendix lists the data (as percent of surface) for vertical attenuation profiles taken at the ELA from 1983 through 1985.

All times reported are standard time, i.e. Central Standard Time (CST).

The attenuation coefficient (k) is the negative slope of a regression of the natural logarithm of the percent surface irradiance at depth. The R^2 (or r^2) value is a measure of the linearity of the regression, wherein 1.00 would represent perfect linearity. The relationship of k to surface irradiance (I_0) and to irradiance at a given depth (I_z) is expressed in the equation:

$$k_z = \ln I_0 - \ln I_z$$

where z is the depth in meters and $\ln$ is the natural logarithm of irradiance I (Wetzel 1975, p. 53).

The depths are in meters. Irradiance values at depth, expressed as percentages of the immersion-corrected, surface irradiance, are calculated from actual measurements at that depth.

LAKE 93 1984

DATE: 22 MAY 84

ATTENUATION COEFFICIENT: .79

TIME: 0940 HOURS

R**2: .9981

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.82	1.00	37.34	2.00	17.86	3.00	8.77
4.00	4.09	5.00	1.95	6.00	0.81	7.00	0.32		

DATE: 19 JUN 84

ATTENUATION COEFFICIENT: .92

TIME: 0835 HOURS

R**2: .9913

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.27	1.00	43.03	2.00	19.39	3.00	8.48
4.00	3.88	5.00	1.82	6.00	0.58	7.00	0.18	8.00	0.05

DATE: 17 JUL 84

ATTENUATION COEFFICIENT: .89

TIME: 0904 HOURS

R**2: .9763

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.39	1.00	40.51	2.00	18.99	3.00	9.81
4.00	4.87	5.00	2.28	6.00	0.53	7.00	0.12		

DATE: 14 AUG 84

ATTENUATION COEFFICIENT: .91

TIME: 0902 HOURS

R**2: .9623

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.57	1.00	42.16	2.00	21.36	3.00	11.70
4.00	5.57	5.00	2.27	6.00	0.60	7.00	0.09		

DATE: 12 SEP 84

ATTENUATION COEFFICIENT: .81

TIME: 0815 HOURS

R**2: .9696

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	50.62	1.00	32.10	2.00	16.05	3.00	9.01
4.00	4.94	5.00	2.72	6.00	0.89	7.00	0.16		

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .77

TIME: 1005 HOURS

R**2: .9975

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.39	1.00	34.66	2.00	16.26	3.00	7.79
4.00	3.75	5.00	1.86	6.00	0.91	7.00	0.35		

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .48

TIME: 0820 HOURS

R 参数 2: .9937

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.32	1.00	44.22	2.00	25.06	3.00	16.62
4.00	11.26	5.00	7.37	6.00	4.82	7.00	3.00	8.00	1.85
9.00	1.01								

LAKE 110 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .61

TIME: 1540 HOURS

R**2: .9974

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	72.71	1.00	55.05	2.00	31.16	3.00	17.04
4.00	10.18	5.00	5.61	6.00	3.01	7.00	1.59	8.00	0.78
9.00	0.35								

DATE: 04 JUL 83

ATTENUATION COEFFICIENT: .57

TIME: 0925 HOURS

R**2: .9872

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	87.05	1.00	65.28	2.00	39.17	3.00	24.37
4.00	14.51	5.00	8.56	6.00	5.08	7.00	2.87	8.00	1.67
9.00	0.57	10.00	0.26						

DATE: 29 JUL 83

ATTENUATION COEFFICIENT: .64

TIME: 1040 HOURS

R**2: .9699

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	73.48	1.00	56.19	2.00	32.42	3.00	19.02
4.00	12.88	5.00	8.04	6.00	4.93	7.00	2.27	8.00	0.99
9.00	0.30	10.00	0.10						

DATE: 29 AUG 83

ATTENUATION COEFFICIENT: .50

TIME: 0830 HOURS

R**2: .9713

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.55	1.00	48.26	2.00	30.68	3.00	22.64
4.00	17.57	5.00	12.09	6.00	7.86	7.00	4.53	8.00	1.85
9.00	0.89	10.00	0.45						

DATE: 03 OCT 83

ATTENUATION COEFFICIENT: .50

TIME: 0830 HOURS

R**2: .9858

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.29	1.00	42.64	2.00	25.38	3.00	16.58
4.00	11.23	5.00	7.51	6.00	5.04	7.00	3.32	8.00	2.00
9.00	0.94	10.00	0.38						

LAKE 110 1984

DATE: 21 MAY 84

ATTENUATION COEFFICIENT: .49

TIME: 0835 HOURS

R**2: .9932

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.26	1.00	46.55	2.00	28.28	3.00	18.45
4.00	13.49	5.00	8.53	6.00	5.57	7.00	3.31	8.00	1.91
9.00	1.04	10.00	0.52						

DATE: 18 JUN 84

ATTENUATION COEFFICIENT: .50

TIME: 0850 HOURS

R**2: .9909

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.00	1.00	48.16	2.00	29.31	3.00	19.09
4.00	11.31	5.00	7.45	6.00	4.56	7.00	3.14	8.00	2.18
9.00	1.09	10.00	0.42						

DATE: 16 JUL 84

ATTENUATION COEFFICIENT: .52

TIME: 0825 HOURS

R**2: .9904

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.40	1.00	46.11	2.00	30.26	3.00	20.46
4.00	12.39	5.00	7.15	6.00	4.50	7.00	2.94	8.00	1.84
9.00	0.95	10.00	0.35						

DATE: 13 AUG 84

ATTENUATION COEFFICIENT: .61

TIME: 0823 HOURS

R**2: .9843

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.26	1.00	53.01	2.00	31.66	3.00	17.38
4.00	12.07	5.00	7.22	6.00	4.05	7.00	2.15	8.00	0.99
9.00	0.41	10.00	0.15						

DATE: 11 SEP 84

ATTENUATION COEFFICIENT: .54

TIME: 0810 HOURS

R**2: .9624

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.60	1.00	34.84	2.00	24.57	3.00	20.55
4.00	13.04	5.00	8.84	6.00	5.54	7.00	3.22	8.00	1.34
9.00	0.62	10.00	0.20						

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .46

TIME: 0823 HOURS

R**2: .9951

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.90	1.00	44.67	2.00	26.80	3.00	17.87
4.00	12.25	5.00	8.04	6.00	4.98	7.00	3.45	8.00	2.30
9.00	1.47	10.00	0.77	11.00	0.45				

TIME: 0840 HOURS

R**2: .9942

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.18	1.00	36.13	2.00	18.65	3.00	12.22
4.00	6.70	5.00	3.81	6.00	2.10	7.00	1.25	8.00	0.59

TIME: 0930 HOURS

R**2: .9911

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.93	1.00	34.27	2.00	16.15	3.00	8.20
4.00	5.00	5.00	3.12	6.00	1.91	7.00	0.98	8.00	0.42
9.00	0.18								

TIME: 0920 HOURS

R**2: .9926

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.90	1.00	39.66	2.00	22.59	3.00	14.12
4.00	9.09	5.00	5.64	6.00	3.29	7.00	1.84	8.00	0.97
9.00	0.41								

TIME: 0922 HOURS

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R**2:      .9961
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.47	1.00	40.23	2.00	20.00	3.00	11.61
4.00	6.79	5.00	3.85	6.00	2.24	7.00	1.38	8.00	0.69
9.00	0.39								

LAKE 111 1984

DATE: 22 MAY 84

ATTENUATION COEFFICIENT: .55

TIME: 1007 HOURS

R**2: .9963

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.24	1.00	42.71	2.00	21.74	3.00	13.75
4.00	8.06	5.00	4.58	6.00	2.57	7.00	1.53	8.00	0.90
9.00	0.56	10.00	0.35						

DATE: 19 JUN 84

ATTENUATION COEFFICIENT: .54

TIME: 0900 HOURS

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.54	1.00	43.08	2.00	24.62	3.00	13.46
4.00	8.08	5.00	5.23	6.00	2.92	7.00	1.81	8.00	1.05
9.00	0.60	10.00	0.35	11.00	0.22	12.00	0.14		

DATE: 17 JUL 84

ATTENUATION COEFFICIENT: .53

TIME: 0930 HOURS

R**2: .9987

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.61	1.00	49.17	2.00	25.97	3.00	17.13
4.00	9.50	5.00	5.86	6.00	3.48	7.00	2.10	8.00	1.22
9.00	0.72	10.00	0.44	11.00	0.27	12.00	0.17		

DATE: 14 AUG 84

ATTENUATION COEFFICIENT: .52

TIME: 0815 HOURS

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.67	1.00	43.83	2.00	26.54	3.00	17.65
4.00	10.49	5.00	6.91	6.00	3.95	7.00	2.41	8.00	1.33
9.00	0.75	10.00	0.47						

DATE: 12 SEP 84

ATTENUATION COEFFICIENT: .48

TIME: 0900 HOURS

R**2: .9922

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.88	1.00	37.06	2.00	22.94	3.00	15.88
4.00	10.59	5.00	7.35	6.00	4.76	7.00	2.76	8.00	1.56
9.00	0.97	10.00	0.56						

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .44

TIME: 0924 HOURS

R**2: .9959

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.04	1.00	44.83	2.00	26.11	3.00	17.24
4.00	12.17	5.00	8.18	6.00	5.42	7.00	3.50	8.00	2.36
9.00	1.58	10.00	0.97	11.00	0.60	12.00	0.36		

LAKE 111 1984

DATE: 15 OCT 84

TIME: 0924 HOURS

ATTENUATION COEFFICIENT: .44

R**2: .9959

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.04	1.00	44.83	2.00	26.11	3.00	17.24
4.00	12.17	5.00	8.18	6.00	5.42	7.00	3.50	8.00	2.36
9.00	1.58	10.00	0.97	11.00	0.60	12.00	0.36		

ATTENUATION COEFFICIENT: .68

R**2: .9963

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.57	1.00	45.62	2.00	22.33	3.00	11.21
4.00	6.56								

ATTENUATION COEFFICIENT: .63

R**2: .9861

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.86	1.00	38.98	2.00	21.32	3.00	12.73
4.00	7.13								

ATTENUATION COEFFICIENT: .72

R**2: .9983

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.60	1.00	45.19	2.00	21.29	3.00	10.91
4.00	5.64								

ATTENUATION COEFFICIENT: .75

R**2: .9753

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	47.64	1.00	29.78	2.00	14.89	3.00	7.44
4.00	4.47								

ATTENUATION COEFFICIENT: .74

R**2: .9675

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.39	1.00	29.16	2.00	13.52	3.00	7.94
4.00	4.65								

ATTENUATION COEFFICIENT: .73

R**2: .9726

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.95	1.00	28.89	2.00	14.84	3.00	8.51
4.00	4.59								

TIME: 1035 HOURS

R**2: .9834

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	50.09	1.00	40.83	2.00	19.54	3.00	10.27
4.00	6.26								

TIME: 0925 HOURS

R**2: .9914

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.94	1.00	38.58	2.00	21.32	3.00	10.66
4.00	6.19								

TIME: 0800 HOURS

R**2: .9550

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.35	1.00	33.77	2.00	20.58	3.00	13.51
4.00	8.90								

TIME: 0955 HOURS

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R**2:      .9828
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.77	1.00	40.00	2.00	19.77	3.00	11.95
4.00	7.36								

TIME: 1002 HOURS

R**2: .9726

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.87	1.00	28.75	2.00	17.94	3.00	9.77
4.00	5.08								

TIME: 0725 HOURS

R**2: .9951

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.83	1.00	29.31	2.00	11.35	3.00	5.30
4.00	1.63								

ATTENUATION COEFFICIENT: .58

R**2: .9935

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.76	1.00	52.57	2.00	26.80	3.00	16.75
4.00	10.31								

ATTENUATION COEFFICIENT: .97

R**2: .9871

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.95	1.00	30.98	2.00	13.89	3.00	6.60
4.00	1.55								

ATTENUATION COEFFICIENT: .92

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R**2: .9787
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.58	1.00	40.20	2.00	20.10	3.00	11.34
4.00	2.32	4.50	1.44						

ATTENUATION COEFFICIENT: .60

R**2: .9652

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.35	1.00	34.26	2.00	20.19	3.00	13.16
4.00	8.14								

ATTENUATION COEFFICIENT: .60

R**2: .9674

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.35	1.00	34.78	2.00	20.65	3.00	11.96
4.00	8.04								

ATTENUATION COEFFICIENT: .48

R**2: .9598

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.71	1.00	42.12	2.00	26.51	3.00	19.33
4.00	13.26								

ATTENUATION COEFFICIENT: .48

R**2: .9676

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.88	1.00	44.83	2.00	26.90	3.00	18.52
4.00	13.40								

ATTENUATION COEFFICIENT: .62

R**2: .9466

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	46.45	1.00	28.59	2.00	17.87	3.00	10.99
4.00	6.88								

R**2: .9858

R**2: .8270

R**2: .9978

R**2: .9587

R**2: .9305

R**2: .9631

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	41.76	1.00	25.60	2.00	11.68	3.00	6.40
4.00	3.68								

TIME: 0805 HOURS

R 第 2: .9167

DATE: 08 JUL 85

TIME: 0955 HOURS

R**2: .9746

DATE: 11 JUL 85

TIME: 0925 HOURS

R 统计量: .9953

DATE: 17 JUL 85

TIME: 0808 HOURS

R**2: .9959

DATE: 18 JUL 85

TIME: 0846 HOURS

R**2: .9947

DATE: 25 JUL 85

TIME: 0941 HOURS

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	38.73	1.00	18.45	2.00	5.36	3.00	1.25
4.00	0.26								

LAKE 221 1985

DATE: 01 AUG 85

ATTENUATION COEFFICIENT: 1.48

TIME: 0920 HOURS

R**2: .9936

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	34.14	1.00	14.84	2.00	5.01	3.00	1.11
4.00	0.20								

DATE: 07 AUG 85

ATTENUATION COEFFICIENT: 1.57

TIME: 0735 HOURS

R**2: .9980

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	38.98	1.00	17.12	2.00	4.49	3.00	0.93
4.00	0.16								

DATE: 08 AUG 85

ATTENUATION COEFFICIENT: 1.46

TIME: 0824 HOURS

R**2: .9595

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.24	1.00	9.94	2.00	3.58	3.00	1.23

DATE: 15 AUG 85

ATTENUATION COEFFICIENT: 1.58

TIME: 0844 HOURS

R**2: .9342

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	36.95	1.00	5.97	2.00	2.50	3.00	0.80

DATE: 22 AUG 85

ATTENUATION COEFFICIENT: 1.48

TIME: 0805 HOURS

R**2: .9872

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	35.16	1.00	13.83	2.00	3.68	3.00	1.09

DATE: 29 AUG 85

ATTENUATION COEFFICIENT: 1.64

TIME: 0827 HOURS

R**2: .9132

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	35.80	1.00	4.43	2.00	1.99	3.00	0.67

LAKE 221 1985

DATE: 05 SEP 85

ATTENUATION COEFFICIENT: 1.55

TIME: 0846 HOURS

R**2: .9883

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	36.22	1.00	13.42	2.00	3.07	3.00	0.92

DATE: 11 SEP 85

ATTENUATION COEFFICIENT: 1.74

TIME: 0900 HOURS

R**2: .9904

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	33.68	1.00	11.05	2.00	2.11	3.00	0.53

DATE: 26 SEP 85

ATTENUATION COEFFICIENT: 2.13

TIME: 0948 HOURS

R**2: .9965

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	23.33	1.00	8.62	2.00	1.17	3.00	0.14

LAKE 222 1983

DATE: 24 MAY 83

ATTENUATION COEFFICIENT: 1.31

TIME: 0720 HOURS

R**2: .9856

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	39.39	1.00	19.90	2.00	6.90	3.00	2.42
4.00	0.69	5.00	0.08						

DATE: 16 JUN 83

ATTENUATION COEFFICIENT: 1.28

TIME: 1105 HOURS

R**2: .9790

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	46.10	1.00	25.35	2.00	9.09	3.00	3.25
4.00	0.96	5.00	0.10						

DATE: 08 JUL 83

ATTENUATION COEFFICIENT: 1.28

TIME: 1025 HOURS

R**2: .9850

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	44.67	1.00	23.82	2.00	5.96	3.00	2.48
4.00	0.89	5.00	0.10						

DATE: 04 AUG 83

ATTENUATION COEFFICIENT: 1.34

TIME: 1045 HOURS

R**2: .9599

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.50	1.00	27.65	2.00	9.53	3.00	3.40
4.00	1.08	5.00	0.06						

DATE: 13 SEP 83

ATTENUATION COEFFICIENT: 1.15

TIME: 0830 HOURS

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.20	1.00	18.83	2.00	5.83	3.00	2.21
4.00	0.85	5.00	0.24						

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: 1.43

TIME: 0940 HOURS

R**2: .9904

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.89	1.00	11.85	2.00	2.73	3.00	0.77
4.00	0.22	5.00	0.06						

LAKE 222 1984

DATE: 07 MAY 84

ATTENUATION COEFFICIENT: 1.35

TIME: 0935 HOURS

R**2: .9839

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	30.26	1.00	12.10	2.00	4.75	3.00	1.47
4.00	0.29								

DATE: 05 JUN 84

ATTENUATION COEFFICIENT: 1.01

TIME: 0905 HOURS

R**2: .9958

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.84	1.00	30.37	2.00	12.00	3.00	5.21
4.00	1.97	5.00	0.52						

DATE: 28 JUN 84

ATTENUATION COEFFICIENT: 1.17

TIME: 1610 HOURS

R**2: .9950

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.45	1.00	21.27	2.00	6.29	3.00	2.02
4.00	0.75	5.00	0.25						

DATE: 31 JUL 84

ATTENUATION COEFFICIENT: 1.11

TIME: 0845 HOURS

R**2: .9893

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.70	1.00	21.11	2.00	8.04	3.00	3.52
4.00	1.23	5.00	0.25						

DATE: 27 AUG 84

ATTENUATION COEFFICIENT: 1.18

TIME: 1525 HOURS

R**2: .9842

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	50.00	1.00	25.04	2.00	10.08	3.00	3.95
4.00	1.26	5.00	0.18						

DATE: 02 OCT 84

ATTENUATION COEFFICIENT: 1.33

TIME: 1545 HOURS

R**2: .9944

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	37.56	1.00	16.22	2.00	4.27	3.00	1.16
4.00	0.38	5.00	0.11						

LAKE 222 1985

DATE: 14 MAY 85

ATTENUATION COEFFICIENT: 1.40

TIME: 0946 HOURS

R**2: .9861

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	30.12	1.00	12.70	2.00	3.36	3.00	0.92
4.00	0.31								

DATE: 11 JUN 85

ATTENUATION COEFFICIENT: 1.38

TIME: 0725 HOURS

R**2: .9901

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.24	1.00	12.18	2.00	3.29	3.00	0.88
4.00	0.24	5.00	0.08						

DATE: 10 JUL 85

ATTENUATION COEFFICIENT: 1.80

TIME: 0715 HOURS

R**2: .9944

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	27.18	1.00	9.80	2.00	2.26	3.00	0.44
4.00	0.05								

DATE: 06 AUG 85

ATTENUATION COEFFICIENT: 1.54

TIME: 0808 HOURS

R**2: .9996

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	42.67	1.00	18.67	2.00	4.33	3.00	0.92
4.00	0.20								

DATE: 04 SEP 85

ATTENUATION COEFFICIENT: 1.56

TIME: 0918 HOURS

R**2: .9915

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	27.58	1.00	11.26	2.00	2.73	3.00	0.66
4.00	0.15								

DATE: 01 OCT 85

ATTENUATION COEFFICIENT: 2.56

TIME: 0835 HOURS

R**2: .9933

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	21.49	1.00	6.08	2.00	0.81	3.00	0.03

LAKE 222 1985

DATE: 23 OCT 85

TIME: 0830 HOURS

ATTENUATION COEFFICIENT: 2.14

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	24.96	1.00	9.45	2.00	1.19	3.00	0.14

LAKE 223 1983

DATE: 11 MAY 83

ATTENUATION COEFFICIENT: .44

TIME: 0745 HOURS

R**2: .9986

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.33	1.00	50.25	2.00	31.32	3.00	20.94
4.00	13.07	5.00	8.96	6.00	5.78	7.00	3.85	8.00	2.45
9.00	1.59	10.00	1.01	11.00	0.65	12.00	0.40		

DATE: 31 MAY 83

ATTENUATION COEFFICIENT: .43

TIME: 0740 HOURS

R**2: .9951

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	80.40	1.00	60.62	2.00	32.54	3.00	22.46
4.00	18.76	5.00	12.76	6.00	8.36	7.00	5.42	8.00	3.57
9.00	2.35	10.00	1.48	11.00	0.91	12.00	0.55	13.00	0.29

DATE: 14 JUN 83

ATTENUATION COEFFICIENT: .36

TIME: 0825 HOURS

R**2: .9126

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.63	1.00	53.73	2.00	37.92	3.00	32.87
4.00	27.31	5.00	22.00	6.00	17.07	7.00	12.89	8.00	9.86
9.00	7.33	10.00	5.03	11.00	3.06	12.00	1.69	13.00	0.73
14.00	0.15								

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .42

TIME: 1445 HOURS

R**2: .9124

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.82	1.00	70.94	2.00	51.67	3.00	38.97
4.00	27.59	5.00	20.41	6.00	14.36	7.00	10.42	8.00	7.93
9.00	5.69	10.00	3.77	11.00	2.29	12.00	1.16	13.00	0.51
14.00	0.06								

DATE: 07 JUL 83

ATTENUATION COEFFICIENT: .44

TIME: 0730 HOURS

R**2: .9532

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	73.63	1.00	58.90	2.00	39.76	3.00	27.98
4.00	19.73	5.00	14.36	6.00	10.01	7.00	7.04	8.00	4.99
9.00	3.56	10.00	2.24	11.00	1.21	12.00	0.47	13.00	0.11

LAKE 223 1983

DATE: 22 JUL 83

TIME: 0730 HOURS

ATTENUATION COEFFICIENT: .49

R**2: .9544

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	79.01	1.00	60.42	2.00	42.60	3.00	30.21
4.00	21.69	5.00	15.34	6.00	10.69	7.00	7.28	8.00	4.88
9.00	3.16	10.00	1.52	11.00	0.55	12.00	0.19	13.00	0.10

DATE: 04 AUG 83

TIME: 1000 HOURS

ATTENUATION COEFFICIENT: .47

R**2: .9405

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	86.45	1.00	69.16	2.00	46.11	3.00	32.66
4.00	25.94	5.00	18.64	6.00	13.64	7.00	9.41	8.00	6.53
9.00	4.27	10.00	2.29	11.00	0.66	12.00	0.28	13.00	0.12

DATE: 23 AUG 83

TIME: 0730 HOURS

ATTENUATION COEFFICIENT: .50

R**2: .9583

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.24	1.00	53.74	2.00	35.65	3.00	23.65
4.00	15.68	5.00	11.20	6.00	7.70	7.00	5.34	8.00	3.69
9.00	2.10	10.00	0.94	11.00	0.29	12.00	0.10		

DATE: 26 AUG 83

TIME: 0905 HOURS

ATTENUATION COEFFICIENT: .48

R**2: .9438

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.39	1.00	59.82	2.00	43.07	3.00	29.67
4.00	22.49	5.00	16.39	6.00	11.25	7.00	7.54	8.00	4.79
9.00	2.73	10.00	1.28	11.00	0.41	12.00	0.14		

DATE: 06 SEP 83

TIME: 0725 HOURS

ATTENUATION COEFFICIENT: .52

R**2: .9394

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	77.58	1.00	55.01	2.00	33.85	3.00	22.29
4.00	15.23	5.00	10.58	6.00	7.84	7.00	5.59	8.00	3.58
9.00	2.03	10.00	0.98	11.00	0.26	12.00	0.06		

LAKE 223 1983

DATE: 20 SEP 83

ATTENUATION COEFFICIENT: .41

TIME: 0745 HOURS

R**2: .9318

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.58	1.00	48.43	2.00	35.52	3.00	25.51
4.00	18.40	5.00	13.08	6.00	9.28	7.00	6.49	8.00	4.60
9.00	3.29	10.00	2.47	11.00	0.31				

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .43

TIME: 1300 HOURS

R**2: .8880

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.19	1.00	50.68	2.00	35.57	3.00	26.17
4.00	19.30	5.00	13.94	6.00	10.23	7.00	7.50	8.00	5.51
9.00	3.98	10.00	2.87	11.00	2.01	12.00	0.68	13.00	0.05

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .36

TIME: 0900 HOURS

R**2: .9924

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	79.25	1.00	57.63	2.00	36.02	3.00	24.49
4.00	15.27	5.00	10.95	6.00	7.78	7.00	5.56	8.00	3.89
9.00	2.82	10.00	2.10	11.00	1.57	12.00	1.15	13.00	0.84

LAKE 223 1984

DATE: 26 JUN 84

ATTENUATION COEFFICIENT: .40

TIME: 0745 HOURS

R**2: .8788

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.30	1.00	43.55	2.00	37.69	3.00	34.34
4.00	30.99	5.00	25.13	6.00	20.44	7.00	15.58	8.00	10.30
9.00	7.37	10.00	4.76	11.00	2.43	12.00	1.02	13.00	0.42
14.00	0.08								

DATE: 10 JUL 84

ATTENUATION COEFFICIENT: .36

TIME: 0810 HOURS

R**2: .9238

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	83.27	1.00	66.04	2.00	47.86	3.00	38.67
4.00	29.29	5.00	22.40	6.00	17.99	7.00	13.88	8.00	10.24
9.00	7.62	10.00	5.32	11.00	2.74	12.00	1.36	13.00	0.30

DATE: 24 JUL 84

ATTENUATION COEFFICIENT: .42

TIME: 0840 HOURS

R**2: .9408

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	90.91	1.00	65.69	2.00	44.46	3.00	32.05
4.00	24.17	5.00	18.39	6.00	14.92	7.00	10.72	8.00	7.57
9.00	4.52	10.00	2.31	11.00	0.91	12.00	0.28		

DATE: 01 AUG 84

ATTENUATION COEFFICIENT: .50

TIME: 0850 HOURS

R**2: .9153

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	80.25	1.00	67.16	2.00	46.50	3.00	35.39
4.00	25.35	5.00	18.68	6.00	14.24	7.00	10.37	8.00	6.58
9.00	3.95	10.00	1.98	11.00	0.69	12.00	0.16	13.00	0.06

DATE: 07 AUG 84

ATTENUATION COEFFICIENT: .50

TIME: 0735 HOURS

R**2: .9204

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	83.75	1.00	67.00	2.00	49.90	3.00	34.91
4.00	24.68	5.00	17.98	6.00	12.34	7.00	9.73	8.00	6.52
9.00	3.17	10.00	1.23	11.00	0.39	12.00	0.10		

LAKE 223 1985

DATE: 30 APR 85

ATTENUATION COEFFICIENT: .61

TIME: 0740 HOURS

R**2: .9968

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.63	1.00	46.06	2.00	21.10	3.00	10.55
4.00	5.78	5.00	3.27	6.00	1.74	7.00	1.02	8.00	0.58
9.00	0.35	10.00	0.20	11.00	0.10				

DATE: 07 MAY 85

ATTENUATION COEFFICIENT: .60

TIME: 0820 HOURS

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.17	1.00	49.52	2.00	23.30	3.00	13.17
4.00	6.82	5.00	3.82	6.00	2.16	7.00	1.22	8.00	0.68
9.00	0.41	10.00	0.24						

DATE: 21 MAY 85

ATTENUATION COEFFICIENT: .63

TIME: 0815 HOURS

R**2: .9982

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.30	1.00	42.28	2.00	20.96	3.00	11.32
4.00	5.84	5.00	3.39	6.00	1.79	7.00	0.99	8.00	0.54
9.00	0.30	10.00	0.15						

DATE: 04 JUN 85

ATTENUATION COEFFICIENT: .54

TIME: 0852 HOURS

R**2: .9956

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.28	1.00	37.13	2.00	20.99	3.00	13.88
4.00	8.40	5.00	5.49	6.00	3.33	7.00	1.91	8.00	1.10
9.00	0.61	10.00	0.36	11.00	0.18				

DATE: 18 JUN 85

ATTENUATION COEFFICIENT: .58

TIME: 0845 HOURS

R**2: .9925

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.39	1.00	46.97	2.00	26.52	3.00	15.15
4.00	8.71	5.00	5.21	6.00	3.20	7.00	2.03	8.00	1.17
9.00	0.59	10.00	0.29	11.00	0.10				

LAKE 223 1985

DATE: 02 JUL 85

TIME: 0840 HOURS

ATTENUATION COEFFICIENT: .55

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.14	1.00	43.31	2.00	27.17	3.00	15.35
4.00	8.82	5.00	5.51	6.00	3.13	7.00	1.92	8.00	1.16
9.00	0.65	10.00	0.31						

DATE: 16 JUL 85

TIME: 0800 HOURS

ATTENUATION COEFFICIENT: .61

R**2: .9705

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.52	1.00	53.44	2.00	34.62	3.00	19.95
4.00	13.55	5.00	8.43	6.00	4.67	7.00	2.37	8.00	1.21
9.00	0.53	10.00	0.11						

DATE: 30 JUL 85

TIME: 0917 HOURS

ATTENUATION COEFFICIENT: .51

R**2: .9806

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.22	1.00	48.96	2.00	32.14	3.00	22.17
4.00	15.33	5.00	10.27	6.00	6.13	7.00	3.65	8.00	2.11
9.00	1.03	10.00	0.36						

DATE: 07 AUG 85

TIME: 0840 HOURS

ATTENUATION COEFFICIENT: .54

R**2: .9800

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.79	1.00	55.21	2.00	35.94	3.00	21.56
4.00	14.58	5.00	9.38	6.00	5.64	7.00	3.29	8.00	1.84
9.00	0.85	10.00	0.26						

DATE: 27 AUG 85

TIME: 0820 HOURS

ATTENUATION COEFFICIENT: .56

R**2: .9885

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.82	1.00	48.42	2.00	27.89	3.00	17.89
4.00	9.05	5.00	6.01	6.00	3.49	7.00	2.20	8.00	1.26
9.00	0.78	10.00	0.20						

LAKE 224 1984

DATE: 07 MAY 84

TIME: 1010 HOURS

ATTENUATION COEFFICIENT: .23

R**2: .9932

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.04	1.00	58.37	2.00	45.73	3.00	41.37
4.00	35.30	5.00	28.87	6.00	23.83	7.00	20.10	8.00	15.89
9.00	12.29	10.00	9.46	11.00	7.32	12.00	5.70	13.00	4.28
14.00	3.18	15.00	2.43	16.00	1.90	17.00	1.51	18.00	1.24

DATE: 05 JUN 84

TIME: 0820 HOURS

ATTENUATION COEFFICIENT: .25

R**2: .9919

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.96	1.00	55.14	2.00	41.98	3.00	36.63
4.00	30.45	5.00	25.51	6.00	20.41	7.00	16.79	8.00	13.66
9.00	10.95	10.00	8.81	11.00	7.00	12.00	5.56	13.00	4.32
14.00	3.31	15.00	2.55	16.00	1.93	17.00	1.43	18.00	1.05
19.00	0.73	20.00	0.53	21.00	0.40	22.00	0.30		

DATE: 28 JUN 84

TIME: 1540 HOURS

ATTENUATION COEFFICIENT: .25

R**2: .9941

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	80.34	1.00	67.68	2.00	53.20	3.00	41.48
4.00	32.46	5.00	26.20	6.00	20.74	7.00	16.23	8.00	13.33
9.00	10.44	10.00	8.48	11.00	6.80	12.00	5.39	13.00	4.44
14.00	3.50	15.00	2.79	16.00	2.07	17.00	1.54	18.00	1.08
19.00	0.75	20.00	0.48						

DATE: 31 JUL 84

TIME: 0805 HOURS

ATTENUATION COEFFICIENT: .24

R**2: .9871

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	73.00	1.00	57.00	2.00	44.25	3.00	38.25
4.00	33.25	5.00	28.25	6.00	23.50	7.00	19.75	8.00	16.00
9.00	12.75	10.00	10.00	11.00	8.00	12.00	6.37	13.00	5.08
14.00	4.00	15.00	3.17	16.00	2.40	17.00	1.75	18.00	1.40
19.00	0.90	20.00	0.60	21.00	0.43				

LAKE 224 1984

DATE: 27 AUG 84

ATTENUATION COEFFICIENT: .25

TIME: 1500 HOURS

R**2: .9908

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	77.94	1.00	64.71	2.00	47.06	3.00	38.97
4.00	31.25	5.00	25.74	6.00	21.76	7.00	17.79	8.00	14.63
9.00	11.84	10.00	9.12	11.00	6.76	12.00	5.51	13.00	4.26
14.00	3.31	15.00	2.50	16.00	1.84	17.00	1.40	18.00	0.97
19.00	0.65	20.00	0.43						

DATE: 18 SEP 84

ATTENUATION COEFFICIENT: .27

TIME: 0900 HOURS

R**2: .9933

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.24	1.00	55.46	2.00	40.97	3.00	31.88
4.00	24.64	5.00	19.61	6.00	15.46	7.00	12.37	8.00	9.86
9.00	8.12	10.00	6.47	11.00	5.31	12.00	3.67	13.00	2.71
14.00	1.98	15.00	1.59	16.00	1.18	17.00	0.82	18.00	0.55
19.00	0.37								

DATE: 02 OCT 84

ATTENUATION COEFFICIENT: .26

TIME: 0750 HOURS

R**2: .9895

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.00	1.00	48.75	2.00	35.00	3.00	26.50
4.00	21.25	5.00	15.50	6.00	12.25	7.00	9.75	8.00	7.62
9.00	6.50	10.00	5.30	11.00	4.25	12.00	3.45	13.00	2.78
14.00	2.20	15.00	1.60	16.00	1.21	17.00	0.86	18.00	0.60
19.00	0.41	20.00	0.26						

DATE: 30 OCT 84

ATTENUATION COEFFICIENT: .30

TIME: 0925 HOURS

R**2: .9890

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.35	1.00	48.73	2.00	31.67	3.00	23.15
4.00	16.81	5.00	11.57	6.00	8.53	7.00	5.85	8.00	4.51
9.00	3.53	10.00	2.62	11.00	2.00	12.00	1.53	13.00	1.18
14.00	0.96	15.00	0.74	16.00	0.57	17.00	0.44	18.00	0.35

LAKE 224 1985

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: .30

TIME: 0840 HOURS

R**2: .9965

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	71.05	1.00	54.74	2.00	36.84	3.00	27.37
4.00	20.53	5.00	15.16	6.00	11.58	7.00	8.42	8.00	6.11
9.00	4.42	10.00	3.16	11.00	2.32	12.00	1.77	13.00	1.34
14.00	1.01	15.00	0.78	16.00	0.59	17.00	0.46	18.00	0.36

DATE: 11 JUN 85

ATTENUATION COEFFICIENT: .20

TIME: 0810 HOURS

R**2: .9905

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	92.77	1.00	82.46	2.00	67.00	3.00	51.54
4.00	41.23	5.00	30.92	6.00	25.77	7.00	20.62	8.00	15.46
9.00	14.60	10.00	12.03	11.00	8.76	12.00	7.22	13.00	6.18
14.00	5.15	15.00	4.64	16.00	4.12	17.00	3.61	18.00	3.09
19.00	2.58								

DATE: 20 JUN 85

ATTENUATION COEFFICIENT: .30

TIME: 0922 HOURS

R**2: .9990

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.04	1.00	66.05	2.00	49.52	3.00	34.35
4.00	25.24	5.00	19.49	6.00	13.90	7.00	10.86	8.00	8.23
9.00	6.29	10.00	4.76	11.00	3.53	12.00	2.74	13.00	2.00
14.00	1.45	15.00	0.97	16.00	0.72	17.00	0.55	18.00	0.42

DATE: 10 JUL 85

ATTENUATION COEFFICIENT: .30

TIME: 0748 HOURS

R**2: .9981

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	80.00	1.00	60.00	2.00	45.60	3.00	29.20
4.00	24.40	5.00	17.76	6.00	13.84	7.00	9.76	8.00	7.44
9.00	5.28	10.00	4.16	11.00	3.12	12.00	2.32	13.00	1.68
14.00	1.33	15.00	0.94	16.00	0.70	17.00	0.44		

LAKE 224 1985

DATE: 06 AUG 85

TIME: 0843 HOURS

ATTENUATION COEFFICIENT: .30

R**2: .9982

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	76.47	1.00	51.96	2.00	37.25	3.00	32.35
4.00	25.00	5.00	18.14	6.00	13.53	7.00	10.10	8.00	7.55
9.00	5.71	10.00	4.33	11.00	3.19	12.00	2.52	13.00	1.73
14.00	1.35	15.00	1.02	16.00	0.75	17.00	0.52	18.00	0.37
19.00	0.27	20.00	0.21						

DATE: 04 SEP 85

TIME: 0830 HOURS

ATTENUATION COEFFICIENT: .26

R**2: .9914

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.62	1.00	55.69	2.00	40.17	3.00	31.98
4.00	27.16	5.00	21.72	6.00	17.59	7.00	13.79	8.00	10.78
9.00	8.36	10.00	6.47	11.00	5.26	12.00	4.14	13.00	3.10
14.00	2.24	15.00	1.55	16.00	1.12	17.00	0.69		

DATE: 01 OCT 85

TIME: 0915 HOURS

ATTENUATION COEFFICIENT: .34

R**2: .9829

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.92	1.00	32.53	2.00	23.49	3.00	16.63
4.00	11.61	5.00	8.70	6.00	6.17	7.00	4.48	8.00	3.19
9.00	2.39	10.00	1.77	11.00	1.33	12.00	0.98	13.00	0.75
14.00	0.50								

DATE: 23 OCT 85

TIME: 0920 HOURS

ATTENUATION COEFFICIENT: .31

R**2: .9905

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.71	1.00	38.08	2.00	36.82	3.00	27.57
4.00	20.25	5.00	12.76	6.00	9.16	7.00	6.49	8.00	4.94
9.00	3.72	10.00	2.85	11.00	2.13	12.00	1.67	13.00	1.30
14.00	0.96	15.00	0.79	16.00	0.42				

LAKE 225 1984

DATE: 12 JUN 84

ATTENUATION COEFFICIENT: 1.47

TIME: 0900 HOURS

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.58	1.00	20.13	1.50	10.86		

DATE: 10 JUL 84

ATTENUATION COEFFICIENT: 2.04

TIME: 0855 HOURS

R**2: .9941

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	69.06	0.50	41.23	0.75	23.71	1.00	13.40

DATE: 07 AUG 84

ATTENUATION COEFFICIENT: 1.97

TIME: 0820 HOURS

R**2: .9947

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	33.17	1.00	14.86	1.25	7.96		

DATE: 18 SEP 84

ATTENUATION COEFFICIENT: 1.80

TIME: 0755 HOURS

R**2: .9999

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.16	1.00	16.59				

LAKE 225 1985

DATE: 21 MAY 85

ATTENUATION COEFFICIENT: 2.30

TIME: 0747 HOURS

R**2: .9987

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.48	1.00	10.05				

DATE: 18 JUN 85

ATTENUATION COEFFICIENT: 1.96

TIME: 0930 HOURS

R**2: .9913

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	33.82	1.00	15.82	1.25	7.88		

DATE: 17 JUL 85

ATTENUATION COEFFICIENT: 2.36

TIME: 0850 HOURS

R**2: .9858

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	24.02	1.00	9.43				

DATE: 07 AUG 85

ATTENUATION COEFFICIENT: 2.00

TIME: 0817 HOURS

R**2: .9698

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	23.94	1.00	9.34	1.50	4.90		

DATE: 11 SEP 85

ATTENUATION COEFFICIENT: 2.03

TIME: 1000 HOURS

R**2: .9788

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.78	1.00	9.15	1.50	5.06		

LAKE 226N 1984

DATE: 01 OCT 84

ATTENUATION COEFFICIENT: .71

TIME: 0820 HOURS

R**2: .9943

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.37	1.00	31.82	2.00	14.52	3.00	6.93
4.00	3.46	5.00	1.79	6.00	0.95	7.00	0.51	8.00	0.29
9.00	0.12								

DATE: 30 OCT 84

ATTENUATION COEFFICIENT: .76

TIME: 0900 HOURS

R**2: .9976

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.09	1.00	33.19	2.00	17.21	3.00	7.13
4.00	3.69	5.00	1.77	6.00	0.86	7.00	0.37	8.00	0.20

LAKE 226N 1985

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: .83

TIME: 0810 HOURS

R**2: .9992

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.67	1.00	38.33	2.00	17.22	3.00	7.00
4.00	3.00	5.00	1.29	6.00	0.57	7.00	0.27	8.00	0.13

DATE: 14 MAY 85

ATTENUATION COEFFICIENT: .74

TIME: 0822 HOURS

R**2: .9992

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.08	1.00	42.38	2.00	18.39	3.00	9.47
4.00	4.49	5.00	2.06	6.00	1.00	7.00	0.50	8.00	0.25

DATE: 12 JUN 85

ATTENUATION COEFFICIENT: .82

TIME: 0801 HOURS

R**2: .9964

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.60	1.00	41.23	2.00	20.46	3.00	9.36
4.00	4.60	5.00	2.09	6.00	0.65	7.00	0.29		

DATE: 10 JUL 85

ATTENUATION COEFFICIENT: .73

TIME: 1020 HOURS

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.54	1.00	45.68	2.00	25.05	3.00	13.02
4.00	6.39	5.00	2.90	6.00	1.35	7.00	0.59	8.00	0.26

DATE: 06 AUG 85

ATTENUATION COEFFICIENT: .74

TIME: 1010 HOURS

R**2: .9988

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.81	1.00	37.50	2.00	20.07	3.00	10.76
4.00	4.78	5.00	2.26	6.00	1.08	7.00	0.47	8.00	0.24

DATE: 03 SEP 85

ATTENUATION COEFFICIENT: .71

TIME: 1015 HOURS

R**2: .9927

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	50.83	1.00	28.93	2.00	12.69	3.00	7.15
4.00	3.97	5.00	2.02	6.00	0.99	7.00	0.50	8.00	0.25

LAKE 226N 1985

DATE: 26 SEP 85

ATTENUATION COEFFICIENT:

.92

TIME: 1002 HOURS

R**2: .9939

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.56	1.00	26.15	2.00	10.78	3.00	4.02
4.00	1.57	5.00	0.83	6.00	0.30	7.00	0.15		

DATE: 23 OCT 85

ATTENUATION COEFFICIENT:

.80

TIME: 0855 HOURS

R**2: .9941

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	49.37	1.00	28.21	2.00	12.64	3.00	5.88
4.00	2.95	5.00	1.45	6.00	0.71	7.00	0.28		

LAKE 226S 1985

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: .81

TIME: 0805 HOURS

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.85	1.00	32.54	2.00	14.79	3.00	6.75
4.00	2.91	5.00	1.30	6.00	0.60	7.00	0.29	8.00	0.14

DATE: 14 MAY 85

ATTENUATION COEFFICIENT: .75

TIME: 0745 HOURS

R**2: .9943

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.07	1.00	31.35	2.00	13.80	3.00	6.93
4.00	3.59	5.00	1.72	6.00	0.86	7.00	0.43		

DATE: 12 JUN 85

ATTENUATION COEFFICIENT: .91

TIME: 0723 HOURS

R**2: .9392

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.69	1.00	30.63	2.00	17.23	3.00	8.61
4.00	4.02	5.00	2.13	6.00	0.80	7.00	0.05		

DATE: 10 JUL 85

ATTENUATION COEFFICIENT: .77

TIME: 0955 HOURS

R**2: .9874

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.07	1.00	42.71	2.00	22.07	3.00	12.10
4.00	6.17	5.00	3.23	6.00	1.45	7.00	0.58	8.00	0.25
9.00	0.06								

DATE: 06 AUG 85

ATTENUATION COEFFICIENT: .73

TIME: 0950 HOURS

R**2: .9997

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.60	1.00	48.00	2.00	21.60	3.00	11.12
4.00	5.48	5.00	2.68	6.00	1.24	7.00	0.58	8.00	0.29

DATE: 03 SEP 85

ATTENUATION COEFFICIENT: .70

TIME: 0950 HOURS

R**2: .9940

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.71	1.00	30.34	2.00	14.14	3.00	7.89
4.00	4.18	5.00	2.24	6.00	1.16	7.00	0.56	8.00	0.26

LAKE 226S 1985

DATE: 26 SEP 85

TIME: 0945 HOURS

ATTENUATION COEFFICIENT: .86

R**2: .9968

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	42.23	1.00	34.28	2.00	13.40	3.00	5.67
4.00	2.30	5.00	1.06	6.00	0.49	7.00	0.20		

DATE: 23 OCT 85

TIME: 0840 HOURS

ATTENUATION COEFFICIENT: .76

R**2: .9774

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	37.74	1.00	20.79	2.00	9.01	3.00	4.35
4.00	2.25	5.00	1.14	6.00	0.59	7.00	0.36		

LAKE 227 1983

DATE: 09 MAY 83

ATTENUATION COEFFICIENT: 1.54

TIME: 0850 HOURS

R**2: .9963

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.70	1.00	22.72	2.00	7.17	3.00	1.17
4.00	0.20	5.00	0.05						

DATE: 16 MAY 83

ATTENUATION COEFFICIENT: 1.50

TIME: 0735 HOURS

R**2: .9848

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.35	1.00	21.28	2.00	6.26	3.00	1.80
4.00	0.17								

DATE: 30 MAY 83

ATTENUATION COEFFICIENT: 1.60

TIME: 0735 HOURS

R**2: .9961

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	39.45	1.00	18.53	2.00	4.63	3.00	1.19
4.00	0.14	5.00	0.03						

DATE: 13 JUN 83

ATTENUATION COEFFICIENT: 1.84

TIME: 0715 HOURS

R**2: .9435

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.35	1.00	24.04	2.00	7.88	3.00	1.32
4.00	0.04								

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: 1.90

TIME: 0735 HOURS

R**2: .9676

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	33.89	1.00	14.63	2.00	3.60	3.00	0.83
4.00	0.03								

DATE: 12 JUL 83

ATTENUATION COEFFICIENT: 2.10

TIME: 1600 HOURS

R**2: .9811

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	52.48	0.50	33.50	1.00	13.07	2.00	2.35
3.00	0.40	4.00	0.01						

LAKE 227 1983

DATE: 21 JUL 83

ATTENUATION COEFFICIENT: 1.91

TIME: 0800 HOURS

R**2: .9956

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	47.37	0.50	32.48	1.00	12.99	2.00	2.44
3.00	0.39	4.00	0.03						

DATE: 25 JUL 83

ATTENUATION COEFFICIENT: 2.83

TIME: 0910 HOURS

R**2: .9903

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	58.35	0.50	39.44	1.00	4.00	2.00	0.54
3.00	0.02								

DATE: 01 AUG 83

ATTENUATION COEFFICIENT: 1.68

TIME: 1535 HOURS

R**2: .9612

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	62.47	0.50	47.35	1.00	25.19	1.50	13.50
2.00	7.96	2.50	3.53	3.00	1.37	3.50	0.33	4.00	0.06

DATE: 08 AUG 83

ATTENUATION COEFFICIENT: 1.50

TIME: 0735 HOURS

R**2: .9918

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	46.95	1.00	22.50	2.00	6.16	3.00	1.60
4.00	0.19								

DATE: 17 AUG 83

ATTENUATION COEFFICIENT: 1.53

TIME: 0730 HOURS

R**2: .9435

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	62.00	0.50	48.00	1.00	26.00	1.50	15.50
2.00	9.84	2.50	5.48	3.00	2.10	3.50	0.64	4.00	0.09

DATE: 22 AUG 83

ATTENUATION COEFFICIENT: 1.42

TIME: 0745 HOURS

R**2: .9580

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.25	67.00	0.50	54.44	1.00	32.87	2.00	14.03
3.00	4.92	3.50	1.93	4.00	0.43	4.50	0.15	5.00	0.05

LAKE 227 1983

DATE: 05 SEP 83

ATTENUATION COEFFICIENT: 1.34

TIME: 0755 HOURS

R**2: .9957

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	44.67	1.00	22.87	2.00	6.97	3.00	2.34
4.00	0.36	5.00	0.12						

DATE: 19 SEP 83

ATTENUATION COEFFICIENT: 1.30

TIME: 0935 HOURS

R**2: .9851

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	42.88	1.00	21.44	2.00	6.70	3.00	2.32
4.00	0.84	5.00	0.09						

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: 1.07

TIME: 1410 HOURS

R**2: .9831

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	36.67	1.00	17.98	2.00	5.78	3.00	2.19
4.00	0.96	5.00	0.39						

DATE: 17 OCT 83

ATTENUATION COEFFICIENT: 1.30

TIME: 0955 HOURS

R**2: .9948

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	38.37	1.00	17.21	2.00	4.63	3.00	1.38
4.00	0.42	5.00	0.13						

LAKE 227 1984

DATE: 02 MAY 84

ATTENUATION COEFFICIENT: 1.40

TIME: 0911 HOURS

R**2: .9971

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	36.06	1.00	19.49	2.00	4.68	3.00	1.25
4.00	0.33								

DATE: 14 MAY 84

ATTENUATION COEFFICIENT: 1.26

TIME: 0815 HOURS

R**2: .9939

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.88	1.00	26.22	2.00	8.97	3.00	2.99
4.00	0.76	5.00	0.14						

DATE: 28 MAY 84

ATTENUATION COEFFICIENT: 1.27

TIME: 0845 HOURS

R**2: .9902

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.69	1.00	30.08	2.00	11.16	3.00	3.58
4.00	0.81	5.00	0.14						

DATE: 11 JUN 84

ATTENUATION COEFFICIENT: 1.27

TIME: 0800 HOURS

R**2: .9781

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.15	1.00	30.63	2.00	12.12	3.00	4.08
4.00	1.02	5.00	0.11						

DATE: 25 JUN 84

ATTENUATION COEFFICIENT: 1.22

TIME: 0845 HOURS

R**2: .9549

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.71	1.00	31.90	2.00	12.97	3.00	5.21
4.00	1.68	5.00	0.12						

DATE: 09 JUL 84

ATTENUATION COEFFICIENT: 1.16

TIME: 0845 HOURS

R**2: .9818

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.60	1.00	29.48	2.00	10.72	3.00	4.29
4.00	1.53	5.00	0.19						

R**2: .9967

R**2: .9978

R**2: .9647

R**2: .9935

R**2: .9906

R**2: .9928

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	25.89	1.00	9.14	2.00	1.98	3.00	0.43
4.00	0.07								

LAKE 227 1985

DATE: 30 APR 85

ATTENUATION COEFFICIENT: 1.52

TIME: 1100 HOURS

R**2: .9970

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	36.65	1.00	16.15	2.00	3.17	3.00	0.73
4.00	0.18	5.00	0.05						

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: 1.40

TIME: 0903 HOURS

R**2: .9996

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.85	1.00	23.88	2.00	6.05	3.00	1.45
4.00	0.35								

DATE: 20 MAY 85

ATTENUATION COEFFICIENT: 1.23

TIME: 0820 HOURS

R**2: .9800

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.17	1.00	12.50	2.00	3.61	3.00	1.14
4.00	0.44	5.00	0.17						

DATE: 03 JUN 85

ATTENUATION COEFFICIENT: 1.47

TIME: 0952 HOURS

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R**2:      .9985
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	38.52	1.00	20.27	2.00	4.44	3.00	1.01
4.00	0.27								

DATE: 21 JUN 85

ATTENUATION COEFFICIENT: 1.57

TIME: 0820 HOURS

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R**2:      .9950
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	30.72	1.00	14.66	2.00	2.74	3.00	0.68
4.00	0.16								

DATE: 01 JUL 85

ATTENUATION COEFFICIENT: 1.76

TIME: 1000 HOURS

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R**2: .9804
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	21.43	1.00	8.95	2.00	1.67	3.00	0.42

LAKE 227 1985

DATE: 15 JUL 85

ATTENUATION COEFFICIENT: 1.92

TIME: 0814 HOURS

R**2: .9904

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	25.62	1.00	7.99	2.00	1.67	3.00	0.26

DATE: 29 JUL 85

ATTENUATION COEFFICIENT: 2.02

TIME: 0820 HOURS

R**2: .9956

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	25.95	1.00	9.06	2.00	1.33	3.00	0.21

DATE: 12 AUG 85

ATTENUATION COEFFICIENT: 1.68

TIME: 0745 HOURS

R**2: .9892

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	30.52	1.00	15.08	2.00	4.10	3.00	0.49

DATE: 26 AUG 85

ATTENUATION COEFFICIENT: 1.73

TIME: 0810 HOURS

R**2: .9927

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	28.89	1.00	12.00	2.00	2.22	3.00	0.50

DATE: 08 SEP 85

ATTENUATION COEFFICIENT: 1.50

TIME: 1505 HOURS

R**2: .9976

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	35.68	1.00	16.51	2.00	3.88	3.00	0.91
4.00	0.22								

DATE: 23 SEP 85

ATTENUATION COEFFICIENT: 1.69

TIME: 0920 HOURS

R**2: .9914

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.57	1.00	11.93	2.00	2.40	3.00	0.57

LAKE 227 1985

DATE: 07 OCT 85

ATTENUATION COEFFICIENT: 1.74

TIME: 0945 HOURS

R**2: .9982

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	31.87	1.00	13.09	2.00	2.70	3.00	0.51
4.00	0.08								

DATE: 22 OCT 85

ATTENUATION COEFFICIENT: 1.64

TIME: 0903 HOURS

R**2: .9732

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	27.49	1.00	8.00	2.00	2.73	3.00	0.57

LAKE 239 1983

DATE: 10 MAY 83

ATTENUATION COEFFICIENT: .55

TIME: 0950 HOURS

R**2: .9874

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.17	1.00	32.79	2.00	17.11	3.00	9.98
4.00	6.67	5.00	3.93	6.00	2.34	7.00	1.40	8.00	0.88
9.00	0.55								

DATE: 31 MAY 83

ATTENUATION COEFFICIENT: .64

TIME: 0955 HOURS

R**2: .9957

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.81	1.00	35.18	2.00	18.84	3.00	10.22
4.00	5.28	5.00	2.89	6.00	1.47	7.00	0.83	8.00	0.46
9.00	0.28								

DATE: 09 JUN 83

ATTENUATION COEFFICIENT: .63

TIME: 0920 HOURS

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.20	1.00	42.72	2.00	21.58	3.00	11.24
4.00	5.98	5.00	3.28	6.00	1.80	7.00	0.95	8.00	0.52
9.00	0.29	10.00	0.18						

DATE: 24 JUN 83

ATTENUATION COEFFICIENT: .57

TIME: 1000 HOURS

R**2: .9992

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.75	1.00	49.11	2.00	26.63	3.00	15.40
4.00	8.32	5.00	4.91	6.00	2.91	7.00	1.70	8.00	0.92
9.00	0.53	10.00	0.28						

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .65

TIME: 1610 HOURS

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.21	1.00	42.84	2.00	20.32	3.00	10.43
4.00	5.49	5.00	2.88	6.00	1.47	7.00	0.80	8.00	0.42
9.00	0.24	10.00	0.14						

LAKE 239 1983

DATE: 12 JUL 83

ATTENUATION COEFFICIENT: .64

TIME: 0835 HOURS

R**2: .9964

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.68	1.00	39.66	2.00	19.83	3.00	11.04
4.00	6.00	5.00	2.89	6.00	2.07	7.00	0.87	8.00	0.49
9.00	0.27	10.00	0.17						

DATE: 22 JUL 83

ATTENUATION COEFFICIENT: .62

TIME: 0900 HOURS

R**2: .9991

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.00	1.00	45.35	2.00	25.25	3.00	13.40
4.00	7.52	5.00	4.12	6.00	2.11	7.00	1.10	8.00	0.60
9.00	0.35	10.00	0.21						

DATE: 09 AUG 83

ATTENUATION COEFFICIENT: .60

TIME: 0855 HOURS

R**2: .9957

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.55	1.00	38.18	2.00	19.09	3.00	11.45
4.00	6.36	5.00	4.23	6.00	2.24	7.00	1.07	8.00	0.59
9.00	0.33	10.00	0.23						

DATE: 17 AUG 83

ATTENUATION COEFFICIENT: .65

TIME: 1605 HOURS

R**2: .9980

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.43	1.00	42.11	2.00	21.70	3.00	11.74
4.00	6.38	5.00	3.64	6.00	1.95	7.00	0.91	8.00	0.40
9.00	0.22	10.00	0.14						

DATE: 23 AUG 83

ATTENUATION COEFFICIENT: .64

TIME: 0850 HOURS

R**2: .9955

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.54	1.00	35.69	2.00	20.00	3.00	10.46
4.00	6.15	5.00	3.35	6.00	2.00	7.00	0.92	8.00	0.45

LAKE 239 1983

DATE: 31 AUG 83

ATTENUATION COEFFICIENT: .63

TIME: 1625 HOURS

R**2: .9980

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.17	1.00	41.16	2.00	21.44	3.00	11.87
4.00	6.51	5.00	3.79	6.00	2.18	7.00	1.08	8.00	0.49
9.00	0.29	10.00	0.18						

DATE: 22 SEP 83

ATTENUATION COEFFICIENT: .56

TIME: 0840 HOURS

R**2: .9966

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.04	1.00	42.43	2.00	21.59	3.00	12.73
4.00	7.44	5.00	4.32	6.00	2.57	7.00	1.52	8.00	0.89
9.00	0.54	10.00	0.31						

DATE: 05 OCT 83

ATTENUATION COEFFICIENT: .52

TIME: 0830 HOURS

R**2: .9947

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.60	1.00	38.27	2.00	21.09	3.00	12.97
4.00	8.03	5.00	4.99	6.00	2.99	7.00	1.75	8.00	1.05
9.00	0.68	10.00	0.41						

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .62

TIME: 1540 HOURS

R**2: .9884

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.26	1.00	31.61	2.00	15.12	3.00	7.56
4.00	4.09	5.00	2.23	6.00	1.27	7.00	0.74	8.00	0.42
9.00	0.29	10.00	0.16						

LAKE 239 1984

DATE: 26 APR 84

ATTENUATION COEFFICIENT: .48

TIME: 1108 HOURS

R**2: .9929

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.35	1.00	42.88	2.00	23.39	3.00	14.86
4.00	9.55	5.00	6.19	6.00	3.97	7.00	2.51	8.00	1.66
9.00	1.10	10.00	0.66						

DATE: 23 MAY 84

ATTENUATION COEFFICIENT: .57

TIME: 1425 HOURS

R**2: .9952

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.72	1.00	42.13	2.00	22.25	3.00	12.13
4.00	6.63	5.00	3.96	6.00	2.25	7.00	1.30	8.00	0.77
9.00	0.48	10.00	0.31						

DATE: 12 JUN 84

ATTENUATION COEFFICIENT: .56

TIME: 0851 HOURS

R**2: .9939

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.83	1.00	39.22	2.00	22.88	3.00	13.73
4.00	9.41	5.00	5.49	6.00	3.33	7.00	2.12	8.00	0.82
9.00	0.55	10.00	0.27						

DATE: 26 JUN 84

ATTENUATION COEFFICIENT: .52

TIME: 0855 HOURS

R**2: .9886

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.28	1.00	28.88	2.00	17.24	3.00	10.78
4.00	6.90	5.00	4.31	6.00	2.63	7.00	1.61	8.00	0.97
9.00	0.59	10.00	0.37						

DATE: 29 JUN 84

ATTENUATION COEFFICIENT: .54

TIME: 1110 HOURS

R**2: .9978

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.54	1.00	52.88	2.00	26.44	3.00	16.66
4.00	9.05	5.00	5.76	6.00	3.22	7.00	2.03	8.00	1.20
9.00	0.69	10.00	0.47						

LAKE 239 1984

DATE: 19 JUL 84

ATTENUATION COEFFICIENT: .53

TIME: 0850 HOURS

R**2: .9971

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.31	1.00	47.27	2.00	26.33	3.00	15.13
4.00	8.73	5.00	4.95	6.00	2.98	7.00	1.75	8.00	1.08
9.00	0.66	10.00	0.40	11.00	0.25	12.00	0.17		

DATE: 24 JUL 84

ATTENUATION COEFFICIENT: .50

TIME: 0841 HOURS

R**2: .9972

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.57	1.00	49.57	2.00	25.22	3.00	16.52
4.00	10.00	5.00	6.09	6.00	3.65	7.00	2.30	8.00	1.44
9.00	0.83	10.00	0.52	11.00	0.37	12.00	0.23		

DATE: 07 AUG 84

ATTENUATION COEFFICIENT: .51

TIME: 0841 HOURS

R**2: .9974

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	96.18	1.00	54.36	2.00	32.42	3.00	22.15
4.00	13.51	5.00	7.29	6.00	4.48	7.00	3.06	8.00	1.83
9.00	1.02	10.00	0.61						

DATE: 15 AUG 84

ATTENUATION COEFFICIENT: .49

TIME: 0835 HOURS

R**2: .9967

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.80	1.00	39.22	2.00	23.14	3.00	15.49
4.00	9.80	5.00	6.08	6.00	3.82	7.00	2.33	8.00	1.41
9.00	0.86	10.00	0.53	11.00	0.35	12.00	0.22		

DATE: 05 SEP 84

ATTENUATION COEFFICIENT: .52

TIME: 0951 HOURS

R**2: .9973

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.98	1.00	43.39	2.00	27.55	3.00	15.15
4.00	8.95	5.00	5.73	6.00	3.55	7.00	2.22	8.00	1.26
9.00	0.76	10.00	0.48						

LAKE 239 1984

DATE: 18 SEP 84

ATTENUATION COEFFICIENT: .51

TIME: 0950 HOURS

R**2: .9948

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.00	1.00	52.26	2.00	26.00	3.00	14.74
4.00	8.36	5.00	4.98	6.00	3.30	7.00	2.03	8.00	1.22
9.00	0.87	10.00	0.53	11.00	0.31				

DATE: 03 OCT 84

ATTENUATION COEFFICIENT: .51

TIME: 0830 HOURS

R**2: .9935

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.07	1.00	41.09	2.00	22.24	3.00	13.58
4.00	7.82	5.00	4.56	6.00	2.95	7.00	1.70	8.00	1.21
9.00	0.78	10.00	0.51	11.00	0.25				

DATE: 16 OCT 84

ATTENUATION COEFFICIENT: .44

TIME: 1355 HOURS

R**2: .9941

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.88	1.00	38.56	2.00	24.10	3.00	15.91
4.00	10.85	5.00	7.23	6.00	4.72	7.00	3.18	8.00	2.10
9.00	1.33	10.00	0.88	11.00	0.59	12.00	0.39		

DATE: 30 OCT 84

ATTENUATION COEFFICIENT: .58

TIME: 1055 HOURS

R**2: .9916

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.12	1.00	35.47	2.00	17.74	3.00	10.09
4.00	5.68	5.00	3.15	6.00	1.85	7.00	1.08	8.00	0.68
9.00	0.40	10.00	0.25						

LAKE 239 1985

DATE: 30 APR 85

TIME: 0915 HOURS

ATTENUATION COEFFICIENT: .61

R**2: .9962

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.85	1.00	40.74	2.00	20.00	3.00	10.00
4.00	5.41	5.00	2.81	6.00	1.59	7.00	0.88	8.00	0.50
9.00	0.29	10.00	0.17	11.00	0.10	12.00	0.06	13.00	0.03

DATE: 07 MAY 85

TIME: 1030 HOURS

ATTENUATION COEFFICIENT: .63

R**2: .9970

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.61	1.00	40.13	2.00	21.02	3.00	11.59
4.00	6.05	5.00	3.18	6.00	1.78	7.00	0.98	8.00	0.55
9.00	0.33								

DATE: 21 MAY 85

TIME: 0830 HOURS

ATTENUATION COEFFICIENT: .75

R**2: .9962

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.40	1.00	35.29	2.00	15.21	3.00	7.66
4.00	3.42	5.00	1.73	6.00	0.80	7.00	0.42	8.00	0.23

DATE: 04 JUN 85

TIME: 0952 HOURS

ATTENUATION COEFFICIENT: .64

R**2: .9852

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	45.94	1.00	25.60	2.00	11.73	3.00	7.08
4.00	3.83	5.00	2.11	6.00	1.10	7.00	0.62	8.00	0.36
9.00	0.24								

DATE: 18 JUN 85

TIME: 1547 HOURS

ATTENUATION COEFFICIENT: .74

R**2: .9857

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	44.72	1.00	26.97	2.00	10.31	3.00	5.03
4.00	2.63	5.00	1.30	6.00	0.70	7.00	0.36	8.00	0.22

LAKE 239 1985

DATE: 02 JUL 85

ATTENUATION COEFFICIENT: .64

TIME: 0915 HOURS

R**2: .9829

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.83	1.00	23.57	2.00	15.26	3.00	6.58
4.00	3.60	5.00	1.71	6.00	0.97	7.00	0.71	8.00	0.41
9.00	0.26	10.00	0.11						

DATE: 16 JUL 85

ATTENUATION COEFFICIENT: .73

TIME: 1040 HOURS

R**2: .9969

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.13	1.00	40.17	2.00	17.77	3.00	8.52
4.00	4.87	5.00	2.63	6.00	1.19	7.00	0.55	8.00	0.24
9.00	0.10								

DATE: 30 JUL 85

ATTENUATION COEFFICIENT: .66

TIME: 0818 HOURS

R**2: .9906

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	41.73	1.00	29.72	2.00	14.76	3.00	7.87
4.00	4.29	5.00	2.19	6.00	1.14	7.00	0.75	8.00	0.33

DATE: 12 AUG 85

ATTENUATION COEFFICIENT: .59

TIME: 0917 HOURS

R**2: .9614

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.91	1.00	16.73	2.00	10.27	3.00	5.98
4.00	3.58	5.00	2.00	6.00	1.13	7.00	0.71	8.00	0.51
9.00	0.33								

DATE: 27 AUG 85

ATTENUATION COEFFICIENT: .76

TIME: 0925 HOURS

R**2: .9942

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.45	1.00	28.36	2.00	15.55	3.00	6.45
4.00	3.16	5.00	1.49	6.00	0.74	7.00	0.39	8.00	0.21

LAKE 239 1985

DATE: 08 SEP 85

TIME: 1358 HOURS

ATTENUATION COEFFICIENT: .75

R**2: .9940

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	44.74	1.00	36.23	2.00	14.82	3.00	6.83
4.00	3.60	5.00	2.02	6.00	0.82	7.00	0.43		

DATE: 24 SEP 85

TIME: 1029 HOURS

ATTENUATION COEFFICIENT: .85

R**2: .9813

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	33.27	1.00	20.79	2.00	9.01	3.00	4.82
4.00	2.44	5.00	1.08	6.00	0.33				

DATE: 07 OCT 85

TIME: 1240 HOURS

ATTENUATION COEFFICIENT: .72

R**2: .9920

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	49.58	1.00	27.25	2.00	12.55	3.00	6.54
4.00	3.31	5.00	1.73	6.00	0.91	7.00	0.45	8.00	0.23

DATE: 21 OCT 85

TIME: 1000 HOURS

ATTENUATION COEFFICIENT: .78

R**2: .9947

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	52.00	1.00	31.85	2.00	12.89	3.00	6.07
4.00	2.81	5.00	1.35	6.00	0.68	7.00	0.34	8.00	0.17

LAKE 240 1983

DATE: 05 MAY 83

ATTENUATION COEFFICIENT: .70

TIME: 0900 HOURS

R**2: .9918

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.75	1.00	34.23	2.00	13.60	3.00	7.08
4.00	3.89	5.00	2.05	6.00	1.06	7.00	0.57	8.00	0.31

DATE: 23 MAY 83

ATTENUATION COEFFICIENT: .67

TIME: 0830 HOURS

R**2: .9944

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.88	1.00	34.52	2.00	16.45	3.00	8.81
4.00	4.87	5.00	2.62	6.00	1.38	7.00	0.74	8.00	0.41

DATE: 09 JUN 83

ATTENUATION COEFFICIENT: .60

TIME: 0940 HOURS

R**2: .9987

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.19	1.00	46.18	2.00	25.80	3.00	13.58
4.00	8.42	5.00	4.98	6.00	2.76	7.00	1.49	8.00	0.75
9.00	0.40	10.00	0.22						

DATE: 24 JUN 83

ATTENUATION COEFFICIENT: .57

TIME: 1015 HOURS

R**2: .9992

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.53	1.00	48.95	2.00	26.55	3.00	15.35
4.00	8.30	5.00	4.90	6.00	2.90	7.00	1.69	8.00	0.92
9.00	0.53	10.00	0.28						

DATE: 18 JUL 83

ATTENUATION COEFFICIENT: .52

TIME: 0845 HOURS

R**2: .9898

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.68	1.00	33.73	2.00	21.32	3.00	15.27
4.00	10.50	5.00	6.24	6.00	3.69	7.00	2.07	8.00	1.11
9.00	0.60								

DATE: 12 AUG 83

ATTENUATION COEFFICIENT: .64

TIME: 0740 HOURS

R**2: .9944

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.16	1.00	45.58	2.00	22.79	3.00	13.67
4.00	7.47	5.00	4.74	6.00	2.64	7.00	1.34	8.00	0.60
9.00	0.27	10.00	0.12						

LAKE 240 1984

DATE: 08 MAY 84
ATTENUATION COEFFICIENT:

.62

TIME: 0925 HOURS
R**2: .9908

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.75	1.00	37.05	2.00	20.97	3.00	11.98
4.00	4.26	5.00	2.84	6.00	1.69	7.00	1.04	8.00	0.63
9.00	0.33								

DATE: 03 JUN 84
ATTENUATION COEFFICIENT:

.53

TIME: 0900 HOURS
R**2: .9989

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.49	1.00	47.89	2.00	28.52	3.00	16.55
4.00	10.21	5.00	6.20	6.00	3.73	7.00	2.25	8.00	1.30
9.00	0.75	10.00	0.42						

DATE: 03 JUL 84
ATTENUATION COEFFICIENT:

.51

TIME: 0810 HOURS
R**2: .9984

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.82	1.00	53.86	2.00	30.22	3.00	20.49
4.00	11.82	5.00	7.75	6.00	4.99	7.00	2.50	8.00	1.58
9.00	0.87	10.00	0.56						

DATE: 30 JUL 84
ATTENUATION COEFFICIENT:

.46

TIME: 0855 HOURS
R**2: .9831

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.32	1.00	40.43	2.00	27.66	3.00	20.38
4.00	14.17	5.00	9.74	6.00	6.38	7.00	4.19	8.00	2.38
9.00	1.24	10.00	0.56						

DATE: 25 AUG 84
ATTENUATION COEFFICIENT:

.52

TIME: 1425 HOURS
R**2: .9897

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.54	1.00	49.67	2.00	30.79	3.00	18.21
4.00	12.91	5.00	8.15	6.00	5.43	7.00	3.31	8.00	1.66
9.00	0.80	10.00	0.36						

LAKE 240 1984

DATE: 01 OCT 84

TIME: 0935 HOURS

ATTENUATION COEFFICIENT: .60

R**2: .9955

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.50	1.00	39.20	2.00	20.10	3.00	10.50
4.00	5.90	5.00	3.30	6.00	1.80	7.00	1.12	8.00	0.63
9.00	0.37	10.00	0.21						

DATE: 29 OCT 84

TIME: 1030 HOURS

ATTENUATION COEFFICIENT: .51

R**2: .9946

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.92	1.00	38.22	2.00	22.85	3.00	13.84
4.00	8.70	5.00	5.23	6.00	3.16	7.00	1.98	8.00	1.23
9.00	0.77	10.00	0.49						

LAKE 240 1985

DATE: 30 AUG 85

ATTENUATION COEFFICIENT: .64

TIME: 1337 HOURS

R**2: .9907

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	49.53	1.00	31.40	2.00	18.37	3.00	13.53
4.00	6.53	5.00	3.60	6.00	1.83	7.00	0.91	8.00	0.39

DATE: 24 SEP 85

ATTENUATION COEFFICIENT: .90

TIME: 0934 HOURS

R**2: .9814

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.25	1.00	22.75	2.00	9.80	3.00	4.90
4.00	2.45	5.00	1.17	6.00	0.50	7.00	0.24	8.00	0.06
9.00	0.01								

DATE: 23 OCT 85

ATTENUATION COEFFICIENT: .92

TIME: 1000 HOURS

R**2: .9920

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.24	1.00	25.01	2.00	9.83	3.00	3.75
4.00	1.79	5.00	0.78	6.00	0.35				

LAKE 260 1985

DATE: 30 MAY 85

ATTENUATION COEFFICIENT: .47

TIME: 0835 HOURS

R**2: .9955

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.44	1.00	44.41	2.00	25.71	3.00	16.83
4.00	11.30	5.00	7.01	6.00	4.44	7.00	2.80	8.00	1.87
9.00	1.17	10.00	0.86	11.00	0.43				

DATE: 24 JUL 85

ATTENUATION COEFFICIENT: .64

TIME: 0950 HOURS

R**2: .9971

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	52.73	1.00	36.36	2.00	22.45	3.00	10.91
4.00	5.98	5.00	3.02	6.00	1.76	7.00	0.98	8.00	0.53
9.00	0.24								

DATE: 21 AUG 85

ATTENUATION COEFFICIENT: .66

TIME: 0740 HOURS

R**2: .9932

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.35	1.00	34.71	2.00	15.88	3.00	9.26
4.00	4.51	5.00	2.62	6.00	1.46	7.00	0.78	8.00	0.43

LAKE 302N 1983

DATE: 04 MAY 83

ATTENUATION COEFFICIENT: .61

TIME: 0925 HOURS

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.77	1.00	43.97	2.00	23.03	3.00	11.73
4.00	6.28	5.00	3.35	6.00	1.87	7.00	1.07	8.00	0.61
9.00	0.35	10.00	0.20						

DATE: 16 MAY 83

ATTENUATION COEFFICIENT: .70

TIME: 0850 HOURS

R**2: .9985

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.64	1.00	41.27	2.00	20.05	3.00	9.22
4.00	4.77	5.00	2.36	6.00	1.24	7.00	0.64	8.00	0.34
9.00	0.17								

DATE: 02 JUN 83

ATTENUATION COEFFICIENT: .71

TIME: 1600 HOURS

R**2: .9975

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.76	1.00	45.91	2.00	24.19	3.00	13.03
4.00	6.82	5.00	3.42	6.00	1.61	7.00	0.76	8.00	0.34
9.00	0.14								

DATE: 16 JUN 83

ATTENUATION COEFFICIENT: .73

TIME: 0840 HOURS

R**2: .9957

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.57	1.00	44.04	2.00	21.39	3.00	11.07
4.00	5.03	5.00	2.52	6.00	1.26	7.00	0.77	8.00	0.35
9.00	0.10								

DATE: 27 JUN 83

ATTENUATION COEFFICIENT: .73

TIME: 0855 HOURS

R**2: .9982

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.97	1.00	43.65	2.00	23.35	3.00	11.07
4.00	5.68	5.00	2.76	6.00	1.37	7.00	0.72	8.00	0.31
9.00	0.12	10.00	0.05						

ATTENUATION COEFFICIENT: .75

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	49.02	1.00	37.59	2.00	17.98	3.00	9.48
4.00	5.23	5.00	2.45	6.00	1.16	7.00	0.56	8.00	0.25
9.00	0.07								

ATTENUATION COEFFICIENT: .74

R**2: .9890

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.42	1.00	48.54	2.00	26.91	3.00	14.67
4.00	7.91	5.00	3.90	6.00	1.88	7.00	0.92	8.00	0.39
9.00	0.12	10.00	0.04						

ATTENUATION COEFFICIENT: .75

R**2: .9826

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.63	1.00	44.67	2.00	25.13	3.00	13.96
4.00	7.26	5.00	3.87	6.00	1.84	7.00	0.89	8.00	0.40
9.00	0.11	10.00	0.03						

ATTENUATION COEFFICIENT: .75

R**2: .9805

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.69	1.00	51.80	2.00	28.15	3.00	15.88
4.00	8.73	5.00	4.22	6.00	1.48	7.00	1.00	8.00	0.45
9.00	0.14	10.00	0.03						

ATTENUATION COEFFICIENT: .83

R**2: .9620

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.27	1.00	51.10	2.00	26.35	3.00	13.74
4.00	7.49	5.00	3.52	6.00	1.57	7.00	0.64	8.00	0.19
8.50	0.04								

LAKE 302N 1983

DATE: 22 AUG 83

ATTENUATION COEFFICIENT: .73

TIME: 0935 HOURS

R**2: .9815

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.82	1.00	50.25	2.00	26.80	3.00	15.08
4.00	8.26	5.00	4.52	6.00	2.03	7.00	0.95	8.00	0.35
9.00	0.08								

DATE: 05 SEP 83

ATTENUATION COEFFICIENT: .72

TIME: 0930 HOURS

R**2: .9698

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.18	1.00	50.25	2.00	27.76	3.00	15.55
4.00	9.93	5.00	5.86	6.00	3.17	7.00	1.44	8.00	0.56
9.00	0.12	10.00	0.05						

DATE: 19 SEP 83

ATTENUATION COEFFICIENT: .64

TIME: 0750 HOURS

R**2: .9688

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.53	1.00	42.28	2.00	23.23	3.00	14.17
4.00	8.52	5.00	5.21	6.00	3.24	7.00	2.02	8.00	0.88
9.00	0.30	10.00	0.07						

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .60

TIME: 1450 HOURS

R**2: .9712

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.67	1.00	38.37	2.00	21.25	3.00	13.52
4.00	8.15	5.00	4.97	6.00	3.02	7.00	2.02	8.00	1.05
9.00	0.47	10.00	0.09						

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .63

TIME: 1500 HOURS

R**2: .9935

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.28	1.00	41.23	2.00	19.47	3.00	9.39
4.00	5.06	5.00	2.66	6.00	1.46	7.00	0.82	8.00	0.51
9.00	0.30	10.00	0.17						

LAKE 302N 1984

DATE: 25 JUN 84

ATTENUATION COEFFICIENT: .72

TIME: 0730 HOURS

R**2: .9971

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.10	1.00	37.75	2.00	19.51	3.00	10.00
4.00	5.49	5.00	2.86	6.00	1.53	7.00	0.70	8.00	0.32
9.00	0.13	10.00	0.06						

DATE: 08 JUL 84

ATTENUATION COEFFICIENT: .72

TIME: 0740 HOURS

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.40	1.00	43.44	2.00	22.60	3.00	12.65
4.00	6.79	5.00	3.63	6.00	1.69	7.00	0.80	8.00	0.28
9.00	0.11								

DATE: 23 JUL 84

ATTENUATION COEFFICIENT: .72

TIME: 0730 HOURS

R**2: .9817

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.06	1.00	44.44	2.00	23.81	3.00	14.60
4.00	8.15	5.00	4.44	6.00	2.17	7.00	0.87	8.00	0.32
9.00	0.09								

DATE: 01 AUG 84

ATTENUATION COEFFICIENT: .74

TIME: 0755 HOURS

R**2: .9807

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.47	1.00	45.47	2.00	24.95	3.00	14.63
4.00	11.26	5.00	4.42	6.00	2.24	7.00	0.91	8.00	0.38
9.00	0.12	10.00	0.04						

DATE: 06 AUG 84

ATTENUATION COEFFICIENT: .76

TIME: 0735 HOURS

R**2: .9664

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.74	1.00	47.37	2.00	28.42	3.00	16.84
4.00	9.47	5.00	5.26	6.00	2.70	7.00	1.07	8.00	0.41
9.00	0.12	10.00	0.02						

LAKE 302N 1984

DATE: 16 AUG 84

ATTENUATION COEFFICIENT: .61

TIME: 0700 HOURS

R**2: .9587

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.00	1.00	44.67	2.00	27.92	3.00	19.54
4.00	13.40	5.00	7.82	6.00	5.03	7.00	2.01	8.00	0.75
9.00	0.20								

DATE: 29 AUG 84

ATTENUATION COEFFICIENT: .62

TIME: 0802 HOURS

R**2: .9594

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	52.11	1.00	40.20	2.00	22.33	3.00	14.44
4.00	9.83	5.00	6.25	6.00	3.57	7.00	1.35	8.00	0.31

DATE: 17 SEP 84

ATTENUATION COEFFICIENT: .67

TIME: 0800 HOURS

R**2: .9932

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.48	1.00	46.16	2.00	21.84	3.00	10.82
4.00	5.96	5.00	3.45	6.00	2.07	7.00	1.21	8.00	0.45
9.00	0.17								

DATE: 03 OCT 84

ATTENUATION COEFFICIENT: .60

TIME: 0845 HOURS

R**2: .9961

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.46	1.00	40.98	2.00	23.22	3.00	12.02
4.00	5.87	5.00	3.36	6.00	1.98	7.00	1.20	8.00	0.71
9.00	0.38	10.00	0.23						

DATE: 16 OCT 84

ATTENUATION COEFFICIENT: .53

TIME: 0743 HOURS

R**2: .9863

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.26	1.00	30.92	2.00	18.90	3.00	12.48
4.00	6.99	5.00	3.95	6.00	2.23	7.00	1.34	8.00	0.97
9.00	0.61	10.00	0.45						

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: .58

TIME: 0940 HOURS

R**2: .9945

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.86	1.00	36.55	2.00	18.58	3.00	10.35
4.00	6.09	5.00	3.47	6.00	2.01	7.00	1.14	8.00	0.69
9.00	0.40	10.00	0.23						

LAKE 302N 1985

DATE: 15 JUL 85

ATTENUATION COEFFICIENT: .70

TIME: 0845 HOURS

R**2: .9907

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	47.42	1.00	32.98	2.00	20.27	3.00	12.71
4.00	7.04	5.00	3.40	6.00	1.55	7.00	0.72	8.00	0.27
9.00	0.13								

DATE: 16 JUL 85

ATTENUATION COEFFICIENT: .77

TIME: 0945 HOURS

R**2: .9846

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.68	1.00	44.98	2.00	25.66	3.00	14.00
4.00	6.97	5.00	3.33	6.00	1.44	7.00	0.60	8.00	0.14

DATE: 29 JUL 85

ATTENUATION COEFFICIENT: .77

TIME: 0920 HOURS

R**2: .9966

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.97	1.00	42.75	2.00	21.13	3.00	10.92
4.00	5.55	5.00	2.61	6.00	0.99	7.00	0.41	8.00	0.18

DATE: 13 AUG 85

ATTENUATION COEFFICIENT: .75

TIME: 0750 HOURS

R**2: .9928

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	52.34	1.00	31.78	2.00	14.95	3.00	9.72
4.00	5.14	5.00	2.43	6.00	0.99	7.00	0.40	8.00	0.17

DATE: 26 AUG 85

ATTENUATION COEFFICIENT: .66

TIME: 0903 HOURS

R**2: .9918

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.46	1.00	35.90	2.00	22.31	3.00	12.13
4.00	7.38	5.00	4.56	6.00	1.79	7.00	0.82	8.00	0.38

DATE: 08 SEP 85

ATTENUATION COEFFICIENT: .69

TIME: 1249 HOURS

R**2: .9946

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.34	1.00	40.76	2.00	21.98	3.00	12.06
4.00	6.63	5.00	3.35	6.00	1.80	7.00	0.77	8.00	0.28

LAKE 302N 1985

DATE: 23 SEP 85

ATTENUATION COEFFICIENT: .67

TIME: 1030 HOURS

R**2: .9904

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.62	1.00	31.30	2.00	14.55	3.00	7.71
4.00	4.35	5.00	2.55	6.00	1.30	7.00	0.81	8.00	0.32

DATE: 07 OCT 85

ATTENUATION COEFFICIENT: .79

TIME: 0835 HOURS

R**2: .9822

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	40.08	1.00	25.99	2.00	8.33	3.00	4.23
4.00	2.22	5.00	1.09	6.00	0.56	7.00	0.30		

DATE: 21 OCT 85

ATTENUATION COEFFICIENT: .88

TIME: 0755 HOURS

R**2: .9904

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.59	1.00	38.28	2.00	11.03	3.00	4.76
4.00	1.83	5.00	0.90	6.00	0.45	7.00	0.24		

R**2: .8795

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	80.86	1.00	64.69	2.00	46.21	3.00	32.92
4.00	23.10	5.00	14.56	6.00	7.91	7.00	3.18	8.00	1.12
9.00	0.09								

R**2: .8711

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.44	1.00	59.56	2.00	42.19	3.00	30.11
4.00	22.00	5.00	13.98	6.00	7.20	7.00	2.71	8.00	0.88
9.00	0.06								

R**2: .9014

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	85.06	1.00	69.91	2.00	44.28	3.00	30.88
4.00	19.23	5.00	13.98	6.00	6.76	7.00	1.84	8.00	0.70
9.00	0.07								

R**2: .9647

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.31	1.00	57.76	2.00	32.92	3.00	18.71
4.00	11.32	5.00	6.82	6.00	3.81	7.00	0.99	8.00	0.38
8.50	0.16								

R**2: .9635

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.74	1.00	47.77	2.00	27.97	3.00	15.85
4.00	9.21	5.00	5.42	6.00	3.32	7.00	1.62	8.00	0.76
9.00	0.11								

R**2: .9706

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.09	1.00	53.14	2.00	31.19	3.00	18.48
4.00	10.86	5.00	6.70	6.00	4.04	7.00	1.40	8.00	0.70
9.00	0.15								

LAKE 302S 1983

DATE: 19 SEP 83

ATTENUATION COEFFICIENT: .55

TIME: 0810 HOURS

R**2: .9962

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.71	1.00	41.73	2.00	22.33	3.00	13.93
4.00	8.46	5.00	5.11	6.00	3.06	7.00	1.76	8.00	1.06
9.00	0.54								

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .45

TIME: 1500 HOURS

R**2: .9926

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.17	1.00	44.51	2.00	26.08	3.00	16.99
4.00	11.39	5.00	7.51	6.00	4.93	7.00	3.28	8.00	2.16
9.00	1.37								

DATE: 18 OCT 83

ATTENUATION COEFFICIENT: .49

TIME: 1450 HOURS

R**2: .9929

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	71.19	1.00	49.20	2.00	25.96	3.00	15.70
4.00	9.46	5.00	5.84	6.00	3.85	7.00	2.41	8.00	1.66
9.00	1.10	9.50	0.85						

ATTENUATION COEFFICIENT:

.37

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.86	1.00	54.52	2.00	38.48	3.00	28.17
4.00	19.93	5.00	14.09	6.00	9.62	7.00	6.76	8.00	4.58
9.00	3.07	9.75	2.29						

ATTENUATION COEFFICIENT:

.37

R**2: .9932

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	77.22	1.00	59.05	2.00	39.97	3.00	24.98
4.00	16.81	5.00	11.99	6.00	8.45	7.00	5.68	8.00	4.27
9.00	3.13	10.00	2.45						

ATTENUATION COEFFICIENT:

.40

R**2: .9886

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	82.13	1.00	64.84	2.00	45.82	3.00	32.85
4.00	24.64	5.00	16.60	6.00	10.81	7.00	7.95	8.00	4.84
9.00	2.94	9.50	1.73						

ATTENUATION COEFFICIENT:

.49

R**2: .9836

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.00	1.00	62.07	2.00	39.48	3.00	26.29
4.00	17.93	5.00	12.16	6.00	7.59	7.00	4.18	8.00	2.17
9.00	0.89								

ATTENUATION COEFFICIENT:

.44

R**2: .9667

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	83.86	1.00	70.79	2.00	45.93	3.00	31.18
4.00	21.91	5.00	16.27	6.00	10.70	7.00	5.62	8.00	1.96

ATTENUATION COEFFICIENT:

.59

R**2: .8900

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	77.05	1.00	59.30	2.00	40.16	3.00	28.29
4.00	20.16	5.00	13.57	6.00	7.75	7.00	4.11	8.00	1.48
9.00	0.14								

LAKE 302S 1984

DATE: 09 JUL 84

ATTENUATION COEFFICIENT: .64

TIME: 0730 HOURS

R**2: .9256

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.90	1.00	49.24	2.00	31.90	3.00	20.00
4.00	13.14	5.00	8.95	6.00	5.05	7.00	2.27	8.00	0.86
9.00	0.10								

DATE: 23 JUL 84

ATTENUATION COEFFICIENT: .74

TIME: 0808 HOURS

R**2: .9554

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	73.18	1.00	52.56	2.00	32.29	3.00	20.18
4.00	13.00	5.00	7.62	6.00	3.50	7.00	0.91	8.00	0.24
9.00	0.10								

DATE: 01 AUG 84

ATTENUATION COEFFICIENT: .74

TIME: 0805 HOURS

R**2: .9335

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	72.11	1.00	56.84	2.00	37.37	3.00	22.95
4.00	15.37	5.00	10.11	6.00	4.95	7.00	0.67	8.00	0.24
9.00	0.09								

DATE: 06 AUG 84

ATTENUATION COEFFICIENT: .78

TIME: 0730 HOURS

R**2: .9304

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.33	1.00	50.67	2.00	32.00	3.00	21.20
4.00	13.60	5.00	9.07	6.00	4.27	7.00	0.51	8.00	0.17
9.00	0.06								

DATE: 16 AUG 84

ATTENUATION COEFFICIENT: .74

TIME: 0730 HOURS

R**2: .9444

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.35	1.00	38.90	2.00	21.18	3.00	13.62
4.00	8.00	5.00	5.27	6.00	2.85	7.00	0.38	8.00	0.13

DATE: 29 AUG 84

ATTENUATION COEFFICIENT: .67

TIME: 0838 HOURS

R**2: .9797

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.73	1.00	50.25	2.00	30.15	3.00	15.58
4.00	9.55	5.00	5.53	6.00	3.02	7.00	1.01	8.00	0.30

LAKE 302S 1984

DATE: 17 SEP 84

ATTENUATION COEFFICIENT: .63

TIME: 0825 HOURS

R**2: .9928

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	73.82	1.00	48.90	2.00	19.28	3.00	9.97
4.00	5.41	5.00	3.24	6.00	1.94	7.00	1.02	8.00	0.64
9.00	0.33								

DATE: 03 OCT 84

ATTENUATION COEFFICIENT: .54

TIME: 0905 HOURS

R**2: .9934

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.00	1.00	41.00	2.00	22.40	3.00	13.00
4.00	7.60	5.00	4.60	6.00	2.80	7.00	1.74	8.00	1.08
9.00	0.68								

DATE: 16 OCT 84

ATTENUATION COEFFICIENT: .51

TIME: 0800 HOURS

R**2: .9919

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.96	1.00	42.88	2.00	27.87	3.00	18.76
4.00	12.60	5.00	7.77	6.00	4.77	7.00	2.50	8.00	1.29
9.00	0.70								

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: .63

TIME: 0920 HOURS

R**2: .9802

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.25	1.00	35.94	2.00	17.91	3.00	9.26
4.00	5.36	5.00	3.29	6.00	1.99	7.00	1.18	8.00	0.71
9.00	0.41	10.00	0.07						

LAKE 302S 1985

DATE: 30 APR 85

ATTENUATION COEFFICIENT: .60

TIME: 0740 HOURS

R**2: .9964

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.14	1.00	42.40	2.00	20.80	3.00	11.31
4.00	6.17	5.00	3.54	6.00	2.02	7.00	1.17	8.00	0.67
9.00	0.39	10.00	0.20						

DATE: 07 MAY 85

ATTENUATION COEFFICIENT: .65

TIME: 0725 HOURS

R**2: .9989

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.00	1.00	42.68	2.00	20.37	3.00	11.34
4.00	5.98	5.00	3.29	6.00	1.78	7.00	0.95	8.00	0.49
9.00	0.25	10.00	0.12						

DATE: 20 MAY 85

ATTENUATION COEFFICIENT: .60

TIME: 0930 HOURS

R**2: .9937

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.58	1.00	50.27	2.00	24.80	3.00	14.98
4.00	9.07	5.00	5.64	6.00	3.20	7.00	1.66	8.00	0.77
9.00	0.32								

DATE: 03 JUN 85

ATTENUATION COEFFICIENT: .58

TIME: 1105 HOURS

R**2: .9815

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	79.76	1.00	57.43	2.00	34.70	3.00	20.90
4.00	13.16	5.00	8.37	6.00	4.95	7.00	2.51	8.00	1.00
9.00	0.36								

DATE: 19 JUN 85

ATTENUATION COEFFICIENT: .67

TIME: 0845 HOURS

R**2: .9911

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.30	1.00	36.13	2.00	21.26	3.00	12.61
4.00	6.97	5.00	4.29	6.00	2.06	7.00	0.94	8.00	0.38
9.00	0.16								

DATE: 01 JUL 85

ATTENUATION COEFFICIENT: .72

TIME: 0925 HOURS

R**2: .9714

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.05	1.00	49.37	2.00	26.45	3.00	15.16
4.00	8.64	5.00	5.05	6.00	2.41	7.00	0.78	8.00	0.18

ATTENUATION COEFFICIENT: .65

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R**2:      .9548
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.40	1.00	58.24	2.00	34.72	3.00	22.55
4.00	-15.01	5.00	8.59	6.00	4.85	7.00	2.02	8.00	0.65
9.00	0.15								

ATTENUATION COEFFICIENT: .58

R**2: .9240

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.81	1.00	62.82	2.00	40.40	3.00	28.06
4.00	20.73	5.00	14.52	6.00	8.47	7.00	3.65	8.00	0.93
9.00	0.27								

ATTENUATION COEFFICIENT: .57

R**2: .9614

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.82	1.00	39.87	2.00	24.18	3.00	16.99
4.00	11.57	5.00	7.78	6.00	4.90	7.00	2.61	8.00	0.86
9.00	0.27								

ATTENUATION COEFFICIENT: .57

R**2: .9481

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	71.70	1.00	51.79	2.00	24.25	3.00	16.23
4.00	11.23	5.00	8.11	6.00	5.00	7.00	3.49	8.00	1.32
9.00	0.24								

ATTENUATION COEFFICIENT: .64

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R**2:      .9191
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DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	72.69	1.00	56.30	2.00	36.30	3.00	21.94
4.00	13.83	5.00	9.16	6.00	5.88	7.00	3.25	8.00	0.73
9.00	0.11								

ATTENUATION COEFFICIENT: .52

R**2: .9894

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	52.02	1.00	35.61	2.00	19.42	3.00	11.73
4.00	7.69	5.00	4.91	6.00	3.06	7.00	1.85	8.00	1.21
9.00	0.58								

R**2: .9919

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.21	1.00	35.47	2.00	19.27	3.00	9.71
4.00	5.44	5.00	3.10	6.00	1.82	7.00	1.10	8.00	0.66
9.00	0.40								

R**2: .9879

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.75	1.00	33.94	2.00	16.40	3.00	7.91
4.00	4.33	5.00	2.56	6.00	1.46	7.00	0.94	8.00	0.55
9.00	0.16								

LAKE 303 1984

DATE: 05 JUN 84

TIME: 1046 HOURS

ATTENUATION COEFFICIENT: .74

R**2: .9314

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	47.72	1.00	35.99	2.00	20.88		

DATE: 02 JUL 84

TIME: 0940 HOURS

ATTENUATION COEFFICIENT: .80

R**2: .9598

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	50.38	1.00	34.95	2.00	18.93		

DATE: 30 JUL 84

TIME: 0845 HOURS

ATTENUATION COEFFICIENT: 1.20

R**2: .9895

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.62	1.00	24.12	2.00	9.00		

DATE: 27 AUG 84

TIME: 0755 HOURS

ATTENUATION COEFFICIENT: 2.12

R**2: .9883

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	24.55	1.00	8.10	2.00	1.35		

DATE: 02 OCT 84

TIME: 0850 HOURS

ATTENUATION COEFFICIENT: 1.81

R**2: .9866

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	29.89	1.00	11.34	2.00	2.53		

LAKE 303 1985

DATE: 15 MAY 85

ATTENUATION COEFFICIENT: 1.14

TIME: 0835 HOURS

R**2: .9782

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.07	1.00	23.93	2.00	9.57		

DATE: 10 JUN 85

ATTENUATION COEFFICIENT: .89

TIME: 0825 HOURS

R**2: .9986

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.09	1.00	38.18	2.00	15.91	2.50	10.55

DATE: 09 JUL 85

ATTENUATION COEFFICIENT: .99

TIME: 0905 HOURS

R**2: .9893

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	52.14	1.00	31.02	2.00	13.30		

DATE: 05 AUG 85

ATTENUATION COEFFICIENT: 1.32

TIME: 0821 HOURS

R**2: .9886

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	41.34	1.00	21.04	2.00	6.80		

DATE: 30 AUG 85

ATTENUATION COEFFICIENT: 1.41

TIME: 0956 HOURS

R**2: .9927

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	41.14	1.00	19.82	2.00	5.73		

DATE: 30 SEP 85

ATTENUATION COEFFICIENT: 1.51

TIME: 0808 HOURS

R**2: .9903

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	32.26	1.00	15.74	2.00	4.23	2.50	1.97

DATE: 21 OCT 85

ATTENUATION COEFFICIENT: 1.16

TIME: 0850 HOURS

R**2: .9862

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	44.22	1.00	25.46	2.00	9.38		

LAKE 304 1984

DATE: 08 MAY 84

ATTENUATION COEFFICIENT: 1.59

TIME: 0800 HOURS

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.67	1.00	20.56	2.00	2.22	3.00	0.73
4.00	0.21	5.00	0.03						

DATE: 04 JUN 84

ATTENUATION COEFFICIENT: 1.04

TIME: 0805 HOURS

R**2: .9861

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	46.29	1.00	28.02	2.00	12.67	3.00	5.60
4.00	1.75	5.00	0.36						

DATE: 02 JUL 84

ATTENUATION COEFFICIENT: 1.18

TIME: 0900 HOURS

R**2: .9631

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.88	1.00	26.11	2.00	11.17	3.00	4.88
4.00	1.44	4.50	0.26						

DATE: 30 JUL 84

ATTENUATION COEFFICIENT: .85

TIME: 0810 HOURS

R**2: .9842

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	46.38	1.00	27.06	2.00	15.08	3.00	7.09
4.00	2.58								

DATE: 27 AUG 84

ATTENUATION COEFFICIENT: 1.22

TIME: 0825 HOURS

R**2: .9499

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.63	1.00	29.89	2.00	11.74	3.00	5.00
4.00	1.79	5.00	0.11						

DATE: 02 OCT 84

ATTENUATION COEFFICIENT: 1.04

TIME: 0820 HOURS

R**2: .9947

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	43.73	1.00	21.86	2.00	8.32	3.00	2.82
4.00	1.18	5.00	0.49	6.00	0.14				

TIME: 0758 HOURS
R**2: .9958

TIME: 0714 HOURS
R**2: .9952

TIME: 0816 HOURS
R**2: .9575

TIME: 0848 HOURS
R**2: .9660

TIME: 0928 HOURS
R**2: .9709

TIME: 0859 HOURS
R**2: .9850

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	23.39	1.00	12.50	2.00	3.37	3.00	1.01
4.00	0.24								

ATTENUATION COEFFICIENT: 1.68

R**2: .9873

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	27.12	1.00	8.14	2.00	1.79	3.00	0.42
4.00	0.09								

LAKE 305 1984

DATE: 09 MAY 84

ATTENUATION COEFFICIENT: .28

TIME: 0800 HOURS

R**2: .9957

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.37	1.00	51.15	2.00	34.27	3.00	27.11
4.00	21.48	5.00	16.11	6.00	12.53	7.00	9.46	8.00	7.06
9.00	5.17	10.00	3.99	11.00	3.02	12.00	2.25	13.00	1.74
14.00	1.33	15.00	1.02	16.00	0.82	17.00	0.61		

DATE: 11 JUN 84

ATTENUATION COEFFICIENT: .32

TIME: 0840 HOURS

R**2: .9983

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	86.38	1.00	74.20	2.00	48.73	3.00	32.12
4.00	22.70	5.00	17.17	6.00	12.29	7.00	9.75	8.00	7.25
9.00	5.20	10.00	3.71	11.00	2.71	12.00	2.10	13.00	1.54
14.00	1.01	15.00	0.70	16.00	0.50				

DATE: 09 JUL 84

ATTENUATION COEFFICIENT: .32

TIME: 0742 HOURS

R**2: .9964

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	87.29	1.00	53.60	2.00	45.94	3.00	32.93
4.00	26.34	5.00	17.92	6.00	14.47	7.00	9.34	8.00	6.51
9.00	5.34	10.00	4.21	11.00	3.22	12.00	2.14	13.00	1.53
14.00	1.13	15.00	0.74	16.00	0.52	17.00	0.32		

DATE: 06 AUG 84

ATTENUATION COEFFICIENT: .30

TIME: 0733 HOURS

R**2: .9994

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.49	1.00	67.00	2.00	47.86	3.00	33.50
4.00	23.93	5.00	19.14	6.00	14.36	7.00	10.72	8.00	7.79
9.00	5.84	10.00	4.17	11.00	2.97	12.00	2.20	13.00	1.67
14.00	1.24	15.00	0.94	16.00	0.70	17.00	0.51	18.00	0.39

DATE: 29 AUG 84

ATTENUATION COEFFICIENT: .33

TIME: 0750 HOURS

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	75.64	1.00	64.10	2.00	39.74	3.00	27.56
4.00	19.87	5.00	14.74	6.00	10.51	7.00	8.59	8.00	6.15
9.00	4.62	10.00	3.21	11.00	2.18	12.00	1.60	13.00	1.15
14.00	0.86	15.00	0.60	16.00	0.46				

LAKE 305 1984

DATE: 01 OCT 84

ATTENUATION COEFFICIENT: .34

TIME: 0750 HOURS

R**2: .9890

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	89.09	1.00	63.09	2.00	34.00	3.00	23.64
4.00	15.82	5.00	10.73	6.00	7.82	7.00	5.64	8.00	4.18
9.00	3.27	10.00	2.45	11.00	1.91	12.00	1.45	13.00	1.05
14.00	0.73	15.00	0.53	16.00	0.38				

DATE: 29 OCT 84

ATTENUATION COEFFICIENT: .33

TIME: 0853 HOURS

R**2: .9915

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	82.60	1.00	60.58	2.00	43.14	3.00	29.37
4.00	20.56	5.00	15.05	6.00	8.81	7.00	6.98	8.00	5.05
9.00	3.69	10.00	2.75	11.00	2.18	12.00	1.74	13.00	1.38
14.00	0.97	15.00	0.75	16.00	0.40	17.00	0.20		

LAKE 305 1985

DATE: 20 MAY 85

ATTENUATION COEFFICIENT: .42

TIME: 0750 HOURS

R**2: .9903

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.50	1.00	42.19	2.00	25.00	3.00	16.25
4.00	10.31	5.00	6.87	6.00	4.44	7.00	3.00	8.00	2.00
9.00	1.38	10.00	0.98	11.00	0.68	12.00	0.49	13.00	0.36

DATE: 19 JUN 85

ATTENUATION COEFFICIENT: .37

TIME: 0945 HOURS

R**2: .9922

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	76.62	1.00	55.84	2.00	35.71	3.00	22.73
4.00	14.94	5.00	10.06	6.00	6.36	7.00	4.25	8.00	3.05
9.00	2.13	10.00	1.68	11.00	1.10	12.00	0.81	13.00	0.59
14.00	0.44	15.00	0.34	16.00	0.25				

DATE: 15 JUL 85

ATTENUATION COEFFICIENT: .39

TIME: 0735 HOURS

R**2: .9959

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.00	1.00	43.75	2.00	28.00	3.00	23.00
4.00	15.75	5.00	10.75	6.00	6.62	7.00	4.62	8.00	3.20
9.00	2.15	10.00	1.58	11.00	1.15	12.00	0.80	13.00	0.50
14.00	0.30								

DATE: 12 AUG 85

ATTENUATION COEFFICIENT: .26

TIME: 0816 HOURS

R**2: .9837

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.30	1.00	41.26	2.00	30.89	3.00	22.79
4.00	16.39	5.00	12.45	6.00	9.44	7.00	6.77	8.00	4.76
9.00	3.75	10.00	3.16	11.00	2.49	12.00	2.01	13.00	1.67
14.00	1.34	15.00	1.08	16.00	0.78	17.00	0.67	18.00	0.56
19.00	0.45								

DATE: 08 SEP 85

ATTENUATION COEFFICIENT: .35

TIME: 1531 HOURS

R**2: .9815

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	77.71	1.00	60.35	2.00	38.85	3.00	22.61
4.00	14.30	5.00	9.28	6.00	6.29	7.00	3.57	8.00	2.60
9.00	1.89	10.00	1.42	11.00	0.96	12.00	0.63	13.00	0.45
14.00	0.34	15.00	0.24	16.00	0.20	17.00	0.16	18.00	0.13
19.00	0.11	20.00	0.08	21.00	0.07	22.00	0.05		

LAKE 305 1985

DATE: 07 OCT 85

TIME: 0915 HOURS

ATTENUATION COEFFICIENT: .43

R**2: .9922

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	71.47	1.00	47.35	2.00	25.01	3.00	15.45
4.00	9.56	5.00	6.61	6.00	4.20	7.00	2.81	8.00	1.89
9.00	1.27	10.00	0.86	11.00	0.59	12.00	0.40	13.00	0.28
14.00	0.19	15.00	0.13						

LAKE 373 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .34

TIME: 0855 HOURS

R**2: .9982

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	80.21	1.00	61.25	2.00	36.46	3.00	29.17
4.00	19.40	5.00	15.75	6.00	10.21	7.00	8.11	8.00	6.07
9.00	3.85	10.00	2.95	11.00	2.13	12.00	1.52	13.00	1.09
14.00	0.77	15.00	0.52	16.00	0.35	17.00	0.27		

DATE: 05 JUL 83

ATTENUATION COEFFICIENT: .31

TIME: 0920 HOURS

R**2: .9950

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.33	1.00	50.56	2.00	40.83	3.00	35.00
4.00	27.22	5.00	21.00	6.00	14.65	7.00	11.67	8.00	7.65
9.00	5.60	10.00	4.02	11.00	2.83	12.00	2.20	13.00	1.43
14.00	1.13	15.00	0.82	16.00	0.54	17.00	0.37		

DATE: 02 AUG 83

ATTENUATION COEFFICIENT: .30

TIME: 0910 HOURS

R**2: .9892

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	76.57	1.00	64.92	2.00	48.27	3.00	39.95
4.00	32.46	5.00	24.97	6.00	19.64	7.00	15.31	8.00	11.80
9.00	8.81	10.00	6.46	11.00	4.73	12.00	3.48	13.00	2.45
14.00	1.70	15.00	1.20	16.00	0.73	17.00	0.45		

DATE: 04 AUG 83

ATTENUATION COEFFICIENT: .33

TIME: 0755 HOURS

R**2: .9899

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.44	1.00	62.04	2.00	46.32	3.00	37.22
4.00	27.79	5.00	20.18	6.00	14.89	7.00	10.84	8.00	8.11
9.00	6.12	10.00	4.53	11.00	3.21	12.00	2.35	13.00	1.65
14.00	1.11	15.00	0.76	16.00	0.49	17.00	0.27	18.00	0.14

DATE: 30 AUG 83

ATTENUATION COEFFICIENT: .32

TIME: 0855 HOURS

R**2: .9977

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	88.23	1.00	76.60	2.00	57.58	3.00	43.85
4.00	29.06	5.00	21.66	6.00	16.38	7.00	12.15	8.00	8.34
9.00	6.55	10.00	4.97	11.00	3.06	12.00	2.28	13.00	1.63
14.00	1.17	15.00	0.86	16.00	0.49				

LAKE 373 1983

DATE: 04 OCT 83

TIME: 0915 HOURS

ATTENUATION COEFFICIENT: .27

R**2: .9805

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.48	1.00	48.56	2.00	38.99	3.00	34.20
4.00	28.07	5.00	23.39	6.00	18.61	7.00	14.85	8.00	11.77
9.00	9.53	10.00	7.27	11.00	5.49	12.00	3.97	13.00	2.76
14.00	1.97	15.00	1.38	16.00	0.94	17.00	0.53		

LAKE 373 1984

DATE: 21 MAY 84

ATTENUATION COEFFICIENT: .32

TIME: 0930 HOURS

R**2: .9961

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.46	1.00	43.08	2.00	30.77	3.00	24.92
4.00	18.92	5.00	14.31	6.00	10.00	7.00	7.08	8.00	5.23
9.00	3.91	10.00	2.92	11.00	2.18	12.00	1.60	13.00	1.17
14.00	0.83	15.00	0.58	16.00	0.40	17.00	0.29		

DATE: 18 JUN 84

ATTENUATION COEFFICIENT: .27

TIME: 0945 HOURS

R**2: .9966

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.63	1.00	51.34	2.00	37.29	3.00	29.22
4.00	23.47	5.00	18.46	6.00	15.16	7.00	11.49	8.00	8.56
9.00	6.60	10.00	5.01	11.00	3.79	12.00	2.93	13.00	2.14
14.00	1.70	15.00	1.28	16.00	0.99	17.00	0.77	18.00	0.50

DATE: 16 JUL 84

ATTENUATION COEFFICIENT: .29

TIME: 0915 HOURS

R**2: .9864

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.67	1.00	47.78	2.00	34.89	3.00	28.89
4.00	24.22	5.00	19.56	6.00	15.56	7.00	12.22	8.00	9.56
9.00	7.11	10.00	5.44	11.00	4.13	12.00	3.20	13.00	2.38
14.00	1.71	15.00	1.19	16.00	0.81	17.00	0.54	18.00	0.33
19.00	0.20								

DATE: 13 AUG 84

ATTENUATION COEFFICIENT: .31

TIME: 0905 HOURS

R**2: .9963

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	74.38	1.00	60.91	2.00	46.45	3.00	35.12
4.00	27.27	5.00	20.50	6.00	15.87	7.00	11.82	8.00	8.93
9.00	6.69	10.00	4.79	11.00	3.55	12.00	2.64	13.00	1.86
14.00	1.41	15.00	0.99	16.00	0.69	17.00	0.45	18.00	0.28

DATE: 11 SEP 84

ATTENUATION COEFFICIENT: .34

TIME: 0755 HOURS

R**2: .9964

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	72.83	1.00	54.34	2.00	35.84	3.00	23.70
4.00	16.42	5.00	12.49	6.00	9.02	7.00	6.94	8.00	5.20
9.00	3.82	10.00	2.66	11.00	1.85	12.00	1.24	13.00	0.92
14.00	0.65	15.00	0.47	16.00	0.37				

LAKE 373 1984

DATE: 16 OCT 84

TIME: 0915 HOURS

ATTENUATION COEFFICIENT: .29

R**2: .9876

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.05	1.00	49.44	2.00	39.03	3.00	30.18
4.00	23.16	5.00	18.21	6.00	13.79	7.00	10.54	8.00	8.07
9.00	6.37	10.00	5.05	11.00	4.14	12.00	3.10	13.00	2.32
14.00	1.64	15.00	1.14	16.00	0.70	17.00	0.43	18.00	0.26

LAKE 373 1985

DATE: 29 MAY 85

ATTENUATION COEFFICIENT:

.32

TIME: 0945 HOURS

R**2: .9940

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.23	1.00	43.18	2.00	28.41	3.00	21.14
4.00	15.68	5.00	11.36	6.00	8.64	7.00	6.70	8.00	4.89
9.00	3.58	10.00	2.58	11.00	1.84	12.00	1.34	13.00	0.99
14.00	0.70	15.00	0.51	16.00	0.38				

DATE: 26 JUN 85

ATTENUATION COEFFICIENT:

.31

TIME: 1050 HOURS

R**2: .9954

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.06	1.00	50.00	2.00	34.03	3.00	27.08
4.00	21.46	5.00	16.88	6.00	12.78	7.00	9.65	8.00	7.29
9.00	5.35	10.00	3.96	11.00	2.92	12.00	2.08	13.00	1.46
14.00	1.04	15.00	0.71	16.00	0.52	17.00	0.35		

DATE: 24 JUL 85

ATTENUATION COEFFICIENT:

.33

TIME: 0850 HOURS

R**2: .9978

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	87.53	1.00	66.32	2.00	45.53	3.00	35.34
4.00	28.07	5.00	21.00	6.00	15.80	7.00	11.64	8.00	6.57
9.00	4.97	10.00	3.70	11.00	2.74	12.00	1.98	13.00	1.50
14.00	1.04	15.00	0.69	16.00	0.46				

DATE: 21 AUG 85

ATTENUATION COEFFICIENT:

.34

TIME: 0940 HOURS

R**2: .9972

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	72.73	1.00	56.82	2.00	40.15	3.00	24.09
4.00	17.88	5.00	13.86	6.00	9.55	7.00	7.27	8.00	5.45
9.00	3.82	10.00	2.46	11.00	1.80	12.00	1.32	13.00	0.90
14.00	0.71	15.00	0.50						

DATE: 25 SEP 85

ATTENUATION COEFFICIENT:

.36

TIME: 0955 HOURS

R**2: .9972

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.38	1.00	49.73	2.00	35.19	3.00	21.42
4.00	17.60	5.00	10.71	6.00	8.42	7.00	6.12	8.00	3.83
9.00	2.68	10.00	1.91	11.00	1.45	12.00	0.99	13.00	0.73
14.00	0.50	15.00	0.34	16.00	0.21				

LAKE 374 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .35

TIME: 1440 HOURS

R**2: .9966

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	77.31	1.00	60.99	2.00	40.37	3.00	25.77
4.00	18.04	5.00	12.46	6.00	8.59	7.00	6.18	8.00	4.29
9.00	3.14	10.00	2.15	11.00	1.59	12.00	1.17	13.00	0.84
14.00	0.63	15.00	0.45	16.00	0.33	17.00	0.25		

DATE: 06 JUL 83

ATTENUATION COEFFICIENT: .36

TIME: 0900 HOURS

R**2: .9952

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	78.82	1.00	61.93	2.00	33.78	3.00	24.77
4.00	18.02	5.00	11.26	6.00	8.45	7.00	5.63	8.00	4.17
9.00	2.82	10.00	2.14	11.00	1.58	12.00	1.13	13.00	0.79
14.00	0.56	15.00	0.44						

DATE: 29 JUL 83

ATTENUATION COEFFICIENT: .35

TIME: 0920 HOURS

R**2: .9971

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	79.41	1.00	64.52	2.00	43.67	3.00	27.30
4.00	19.85	5.00	12.90	6.00	8.83	7.00	6.60	8.00	4.47
9.00	3.18	10.00	2.23	11.00	1.49	12.00	1.06	13.00	0.83
14.00	0.61	15.00	0.45	16.00	0.32	17.00	0.25		

DATE: 29 AUG 83

ATTENUATION COEFFICIENT: .31

TIME: 0905 HOURS

R**2: .9978

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.75	1.00	50.67	2.00	35.19	3.00	27.03
4.00	20.55	5.00	15.76	6.00	12.11	7.00	9.06	8.00	6.64
9.00	4.87	10.00	3.40	11.00	2.43	12.00	1.78	13.00	1.28
14.00	0.92	15.00	0.67	16.00	0.50	17.00	0.38	18.00	0.28

DATE: 03 OCT 83

ATTENUATION COEFFICIENT: .30

TIME: 0910 HOURS

R**2: .9954

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.04	1.00	45.79	2.00	33.50	3.00	27.21
4.00	20.41	5.00	15.18	6.00	11.51	7.00	8.37	8.00	6.67
9.00	4.76	10.00	3.56	11.00	2.62	12.00	2.01	13.00	1.52
14.00	1.11	15.00	0.80	16.00	0.63				

LAKE 374 1984

DATE: 22 MAY 84

ATTENUATION COEFFICIENT: .32

TIME: 0840 HOURS

R**2: .9917

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.80	1.00	54.12	2.00	36.47	3.00	23.92
4.00	16.47	5.00	11.76	6.00	8.24	7.00	5.88	8.00	4.24
9.00	2.98	10.00	2.20	11.00	1.65	12.00	1.18	13.00	0.94
14.00	0.72	15.00	0.55	16.00	0.42	17.00	0.33	18.00	0.25

DATE: 19 JUN 84

ATTENUATION COEFFICIENT: .32

TIME: 0742 HOURS

R**2: .9920

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.04	1.00	53.93	2.00	33.71	3.00	21.47
4.00	14.98	5.00	10.36	6.00	7.74	7.00	5.74	8.00	4.12
9.00	3.12	10.00	2.25	11.00	1.69	12.00	1.22	13.00	0.91
14.00	0.69	15.00	0.52	16.00	0.40	17.00	0.30	18.00	0.24

DATE: 17 JUL 84

ATTENUATION COEFFICIENT: .35

TIME: 0755 HOURS

R**2: .9962

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.18	1.00	57.80	2.00	38.07	3.00	24.77
4.00	16.51	5.00	11.47	6.00	8.26	7.00	5.87	8.00	4.13
9.00	2.94	10.00	2.11	11.00	1.52	12.00	1.06	13.00	0.77
14.00	0.59	15.00	0.44	16.00	0.32				

DATE: 14 AUG 84

ATTENUATION COEFFICIENT: .31

TIME: 0949 HOURS

R**2: .9975

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	1.00	60.25	3.00	29.79	5.00	16.32	7.00	11.38
10.00	3.68	13.00	1.38	16.00	0.55	19.00	0.24		

DATE: 12 SEP 84

ATTENUATION COEFFICIENT: .30

TIME: 0926 HOURS

R**2: .9958

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.71	1.00	47.06	2.00	32.94	3.00	25.10
4.00	18.82	5.00	14.90	6.00	11.37	7.00	9.02	8.00	6.67
9.00	5.10	10.00	3.88	11.00	2.90	12.00	2.08	13.00	1.41
14.00	1.02	15.00	0.75	16.00	0.53	17.00	0.41	18.00	0.30

LAKE 374 1984

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .27

TIME: 0900 HOURS

R**2: .9948

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.30	1.00	50.54	2.00	36.44	3.00	28.92
4.00	22.10	5.00	17.28	6.00	13.16	7.00	10.23	8.00	8.05
9.00	6.23	10.00	4.76	11.00	3.82	12.00	3.01	13.00	2.32
14.00	1.72	15.00	1.29	16.00	0.85	17.00	0.79		

LAKE 374 1985

DATE: 29 MAY 85

ATTENUATION COEFFICIENT: .49

TIME: 0930 HOURS

R**2: .9838

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.00	1.00	47.15	2.00	29.03	3.00	21.09
4.00	14.39	5.00	9.68	6.00	5.96	7.00	3.72	8.00	1.86
9.00	0.74								

DATE: 25 JUN 85

ATTENUATION COEFFICIENT: .41

TIME: 0845 HOURS

R**2: .9831

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.52	1.00	42.39	2.00	24.78	3.00	14.13
4.00	8.70	5.00	5.65	6.00	3.70	7.00	2.61	8.00	1.74
9.00	1.50	10.00	1.09	11.00	0.67	12.00	0.46	13.00	0.35

DATE: 20 AUG 85

ATTENUATION COEFFICIENT: .34

TIME: 0830 HOURS

R**2: .9895

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.84	1.00	30.53	2.00	25.26	3.00	18.95
4.00	13.96	5.00	10.13	6.00	6.84	7.00	5.16	8.00	3.75
9.00	2.65	10.00	1.87	11.00	1.43	12.00	1.03	13.00	0.74
14.00	0.55	15.00	0.40						

LAKE 382 1983

DATE: 19 MAY 83

ATTENUATION COEFFICIENT: .58

TIME: 0745 HOURS

R**2: .9971

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.53	1.00	37.27	2.00	20.73	3.00	12.14
4.00	6.99	5.00	3.98	6.00	2.28	7.00	1.30	8.00	0.75
9.00	0.42	10.00	0.23						

DATE: 20 JUN 83

ATTENUATION COEFFICIENT: .58

TIME: 0740 HOURS

R**2: .9978

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.85	1.00	39.39	2.00	21.73	3.00	12.95
4.00	7.88	5.00	4.39	6.00	2.45	7.00	1.39	8.00	0.81
9.00	0.42	10.00	0.24						

DATE: 12 JUL 83

ATTENUATION COEFFICIENT: .64

TIME: 1515 HOURS

R**2: .9990

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.62	1.00	46.57	2.00	24.71	3.00	13.30
4.00	7.79	5.00	4.09	6.00	2.09	7.00	1.06	8.00	0.59
9.00	0.30	10.00	0.13						

DATE: 12 AUG 83

ATTENUATION COEFFICIENT: .62

TIME: 0945 HOURS

R**2: .9978

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.79	1.00	53.09	2.00	29.08	3.00	16.43
4.00	9.86	5.00	5.88	6.00	2.88	7.00	1.49	8.00	0.76
9.00	0.36	10.00	0.20						

DATE: 08 SEP 83

ATTENUATION COEFFICIENT: .56

TIME: 0800 HOURS

R**2: .9972

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.70	1.00	42.62	2.00	23.72	3.00	14.23
4.00	8.87	5.00	5.49	6.00	3.38	7.00	1.76	8.00	0.95
9.00	0.50	10.00	0.30						

DATE: 17 OCT 83

ATTENUATION COEFFICIENT: .57

TIME: 0825 HOURS

R**2: .9944

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.20	1.00	38.67	2.00	19.61	3.00	11.44
4.00	6.54	5.00	3.68	6.00	2.12	7.00	1.27	8.00	0.75
9.00	0.46	10.00	0.29						

LAKE 382 1984

DATE: 09 MAY 84

ATTENUATION COEFFICIENT: .51

TIME: 0930 HOURS

R**2: .9931

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.31	1.00	35.26	2.00	20.92	3.00	13.16
4.00	8.23	5.00	5.15	6.00	3.17	7.00	1.95	8.00	1.22
9.00	0.72	10.00	0.46						

DATE: 28 MAY 84

ATTENUATION COEFFICIENT: .59

TIME: 0740 HOURS

R**2: .9975

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	70.60	1.00	45.76	2.00	24.19	3.00	13.99
4.00	8.30	5.00	4.90	6.00	3.09	7.00	1.58	8.00	0.78
9.00	0.44								

DATE: 25 JUN 84

ATTENUATION COEFFICIENT: .64

TIME: 0740 HOURS

R**2: .9948

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.44	1.00	38.64	2.00	21.81	3.00	11.97
4.00	7.17	5.00	3.93	6.00	2.36	7.00	1.21	8.00	0.65
9.00	0.28	10.00	0.11						

DATE: 16 AUG 84

ATTENUATION COEFFICIENT: .63

TIME: 0725 HOURS

R**2: .9941

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.46	1.00	39.23	2.00	22.00	3.00	12.62
4.00	7.69	5.00	4.77	6.00	2.46	7.00	1.29	8.00	0.62
9.00	0.28	10.00	0.12						

DATE: 17 SEP 84

ATTENUATION COEFFICIENT: .66

TIME: 0825 HOURS

R**2: .9943

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.53	1.00	36.06	2.00	17.86	3.00	8.64
4.00	4.72	5.00	2.53	6.00	1.54	7.00	0.86	8.00	0.50
9.00	0.22	10.00	0.08						

DATE: 17 OCT 84

ATTENUATION COEFFICIENT: .50

TIME: 0840 HOURS

R**2: .9945

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.14	1.00	38.57	2.00	22.88	3.00	14.38
4.00	10.33	5.00	6.28	6.00	3.73	7.00	2.35	8.00	1.44
9.00	0.85	10.00	0.47						

LAKE 382 1985

DATE: 08 MAY 85

ATTENUATION COEFFICIENT: .67

TIME: 0815 HOURS

R**2: .9948

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.60	1.00	35.51	2.00	16.35	3.00	8.51
4.00	3.91	5.00	2.18	6.00	1.16	7.00	0.60	8.00	0.33
9.00	0.19	10.00	0.11						

DATE: 05 JUN 85

ATTENUATION COEFFICIENT: .71

TIME: 0735 HOURS

R**2: .9916

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.00	1.00	36.00	2.00	15.33	3.00	7.27
4.00	3.27	5.00	1.67	6.00	0.87	7.00	0.48	8.00	0.25
9.00	0.17								

DATE: 01 JUL 85

ATTENUATION COEFFICIENT: .74

TIME: 0855 HOURS

R**2: .9979

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.61	1.00	39.56	2.00	18.02	3.00	8.28
4.00	3.88	5.00	1.89	6.00	0.94	7.00	0.45	8.00	0.26

DATE: 28 AUG 85

ATTENUATION COEFFICIENT: .78

TIME: 0720 HOURS

R**2: .9959

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	46.26	1.00	34.81	2.00	16.21	3.00	6.29
4.00	3.06	5.00	1.64	6.00	0.70	7.00	0.35		

DATE: 26 SEP 85

ATTENUATION COEFFICIENT: .89

TIME: 0850 HOURS

R**2: .9955

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.52	1.00	27.12	2.00	12.09	3.00	4.59
4.00	1.94	5.00	0.83	6.00	0.39	7.00	0.18		

DATE: 22 OCT 85

ATTENUATION COEFFICIENT: .84

TIME: 0820 HOURS

R**2: .9958

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	48.34	1.00	29.70	2.00	12.98	3.00	5.52
4.00	2.62	5.00	1.38	6.00	0.55	7.00	0.21		

LAKE 382BAY 1983

DATE: 19 MAY 83

ATTENUATION COEFFICIENT: .79

TIME: 0805 HOURS

R**2: .9527

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	45.64	1.00	27.64	2.00	13.82	3.00	8.37

DATE: 20 JUN 83

ATTENUATION COEFFICIENT: .93

TIME: 0800 HOURS

R**2: .9827

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	47.24	1.00	27.48	2.00	12.22	3.00	5.63

DATE: 12 JUL 83

ATTENUATION COEFFICIENT: .84

TIME: 1530 HOURS

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.33	1.00	34.78	2.00	16.16	3.00	7.88

DATE: 12 AUG 83

ATTENUATION COEFFICIENT: .73

TIME: 0955 HOURS

R**2: .9963

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.00	1.00	43.00	2.00	21.50	3.00	10.40

DATE: 08 SEP 83

ATTENUATION COEFFICIENT: .76

TIME: 0810 HOURS

R**2: .9876

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.54	1.00	36.51	2.00	18.25	3.00	9.36

DATE: 17 OCT 83

ATTENUATION COEFFICIENT: .67

TIME: 0840 HOURS

R**2: .9877

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.52	1.00	40.63	2.00	22.48	3.00	12.54

LAKE 382BAY 1984

DATE: 09 MAY 84

TIME: 0950 HOURS

ATTENUATION COEFFICIENT: .85

R**2: .9639

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	47.98	1.00	26.47	2.00	14.72	2.75	8.60

DATE: 28 MAY 84

TIME: 0805 HOURS

ATTENUATION COEFFICIENT: .75

R**2: .9908

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.85	1.00	38.72	2.00	18.69	3.00	10.20

DATE: 25 JUN 84

TIME: 0805 HOURS

ATTENUATION COEFFICIENT: 1.03

R**2: .9891

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.61	1.00	25.71	2.00	10.41	3.00	4.35

DATE: 16 AUG 84

TIME: 0755 HOURS

ATTENUATION COEFFICIENT: .83

R**2: .9893

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.73	1.00	34.12	2.00	16.08	3.00	7.84

DATE: 17 SEP 84

TIME: 0845 HOURS

ATTENUATION COEFFICIENT: .80

R**2: .9891

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	53.61	1.00	35.21	2.00	17.72	3.00	8.35

DATE: 17 OCT 84

TIME: 0855 HOURS

ATTENUATION COEFFICIENT: .68

R**2: .9925

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.06	1.00	42.41	2.00	23.07	3.00	12.21

LAKE 622 1983

DATE: 07 JUN 83
 ATTENUATION COEFFICIENT: .58

TIME: 0755 HOURS
 R**2: .9963

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.35	1.00	44.23	2.00	22.38	3.00	10.93
4.00	6.37	5.00	3.71	6.00	1.99	7.00	1.13	8.00	0.65
9.00	0.39	10.00	0.23	11.00	0.14	12.00	0.08		

DATE: 05 JUL 83
 ATTENUATION COEFFICIENT: .58

TIME: 0815 HOURS
 R**2: .9911

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.12	1.00	45.58	2.00	19.86	3.00	11.23
4.00	5.37	5.00	3.42	6.00	1.95	7.00	1.22	8.00	0.66
9.00	0.45	10.00	0.28						

DATE: 02 AUG 83
 ATTENUATION COEFFICIENT: .50

TIME: 0755 HOURS
 R**2: .9942

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	61.26	1.00	40.84	2.00	22.97	3.00	14.29
4.00	8.68	5.00	5.31	6.00	3.09	7.00	1.82	8.00	1.12
9.00	0.74	10.00	0.50	11.00	0.33	12.00	0.22		

DATE: 30 AUG 83
 ATTENUATION COEFFICIENT: .55

TIME: 0740 HOURS
 R**2: .9948

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.58	1.00	44.14	2.00	25.53	3.00	15.98
4.00	10.28	5.00	6.59	6.00	3.95	7.00	2.08	8.00	1.12
9.00	0.59	10.00	0.28						

DATE: 04 OCT 83
 ATTENUATION COEFFICIENT: .47

TIME: 0820 HOURS
 R**2: .9919

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.18	1.00	36.79	2.00	21.44	3.00	13.77
4.00	8.87	5.00	6.51	6.00	3.75	7.00	2.39	8.00	1.56
9.00	1.02	10.00	0.63	11.00	0.41				

LAKE 623 1983

DATE: 07 JUN 83

ATTENUATION COEFFICIENT: .55

TIME: 0735 HOURS

R**2: .9965

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.00	1.00	38.00	2.00	26.00	3.00	14.60
4.00	8.20	5.00	4.36	6.00	2.52	7.00	1.72	8.00	0.98
9.00	0.54	10.00	0.34						

DATE: 05 JUL 83

ATTENUATION COEFFICIENT: .54

TIME: 0750 HOURS

R**2: .9980

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	68.37	1.00	45.12	2.00	25.98	3.00	15.04
4.00	9.16	5.00	5.26	6.00	3.17	7.00	1.90	8.00	1.14
9.00	0.67	10.00	0.40						

DATE: 02 AUG 83

ATTENUATION COEFFICIENT: .49

TIME: 0735 HOURS

R**2: .9985

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.95	1.00	45.41	2.00	28.76	3.00	16.88
4.00	11.73	5.00	7.19	6.00	4.74	7.00	2.69	8.00	1.59
9.00	0.93	10.00	0.59	11.00	0.37	12.00	0.23	13.00	0.16

DATE: 30 AUG 83

ATTENUATION COEFFICIENT: .51

TIME: 0755 HOURS

R**2: .9967

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	66.80	1.00	47.60	2.00	29.60	3.00	19.20
4.00	12.64	5.00	8.40	6.00	5.48	7.00	3.16	8.00	1.62
9.00	0.92	10.00	0.54	11.00	0.31	12.00	0.20		

DATE: 04 OCT 83

ATTENUATION COEFFICIENT: .44

TIME: 0755 HOURS

R**2: .9921

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	60.99	1.00	38.81	2.00	23.91	3.00	16.43
4.00	10.88	5.00	7.28	6.00	4.82	7.00	3.22	8.00	2.15
9.00	1.40	10.00	0.97	11.00	0.48				

LAKE 623 1984

DATE: 23 MAY 84

ATTENUATION COEFFICIENT: .40

TIME: 1015 HOURS

R**2: .9898

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	71.30	1.00	53.04	2.00	34.78	3.00	20.87
4.00	14.49	5.00	9.51	6.00	6.67	7.00	4.29	8.00	2.84
9.00	2.90	10.00	1.74	11.00	1.10	12.00	0.49		

DATE: 18 JUN 84

ATTENUATION COEFFICIENT: .44

TIME: 0830 HOURS

R**2: .9989

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	69.92	1.00	51.33	2.00	31.02	3.00	20.70
4.00	13.44	5.00	8.98	6.00	5.86	7.00	3.83	8.00	2.42
9.00	1.56	10.00	1.02	11.00	0.64	12.00	0.40	13.00	0.27

DATE: 16 JUL 84

ATTENUATION COEFFICIENT: .41

TIME: 0755 HOURS

R**2: .9931

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.07	1.00	37.60	2.00	23.20	3.00	16.80
4.00	11.73	5.00	8.00	6.00	5.44	7.00	3.57	8.00	2.35
9.00	1.57	10.00	1.07	11.00	0.72	12.00	0.51	13.00	0.36

DATE: 13 AUG 84

ATTENUATION COEFFICIENT: .49

TIME: 0800 HOURS

R**2: .9983

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	67.13	1.00	46.21	2.00	29.31	3.00	18.39
4.00	11.49	5.00	7.36	6.00	4.60	7.00	2.99	8.00	1.78
9.00	1.08	10.00	0.64	11.00	0.37	12.00	0.21		

DATE: 11 SEP 84

ATTENUATION COEFFICIENT: .44

TIME: 0905 HOURS

R**2: .9940

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	54.67	1.00	40.80	2.00	26.40	3.00	17.60
4.00	11.73	5.00	8.00	6.00	5.33	7.00	3.68	8.00	2.35
9.00	1.49	10.00	0.85	11.00	0.51				

DATE: 16 OCT 84

ATTENUATION COEFFICIENT: .51

TIME: 0835 HOURS

R**2: .9917

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.09	1.00	35.53	2.00	19.57	3.00	11.47
4.00	7.23	5.00	4.49	6.00	2.49	7.00	1.68	8.00	1.17
9.00	0.69	10.00	0.42	11.00	0.24				

LAKE 623 1985

DATE: 29 MAY 85

ATTENUATION COEFFICIENT: .52

TIME: 0850 HOURS

R**2: .9918

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.00	1.00	34.00	2.00	19.00	3.00	12.10
4.00	7.50	5.00	4.57	6.00	2.70	7.00	1.63	8.00	1.00
9.00	0.63	10.00	0.41						

DATE: 26 JUN 85

ATTENUATION COEFFICIENT: .50

TIME: 0820 HOURS

R**2: .9872

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	50.08	1.00	35.28	2.00	18.74	3.00	11.89
4.00	7.72	5.00	4.96	6.00	2.99	7.00	1.97	8.00	1.18
9.00	0.79								

DATE: 24 JUL 85

ATTENUATION COEFFICIENT: .48

TIME: 0757 HOURS

R**2: .9929

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	49.58	1.00	38.87	2.00	21.13	3.00	14.14
4.00	8.59	5.00	5.52	6.00	3.72	7.00	2.17	8.00	1.44
9.00	0.93	10.00	0.56	11.00	0.39				

DATE: 21 AUG 85

ATTENUATION COEFFICIENT: .54

TIME: 0850 HOURS

R**2: .9957

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	59.61	1.00	44.61	2.00	22.65	3.00	13.33
4.00	8.21	5.00	4.79	6.00	2.79	7.00	1.66	8.00	1.07
9.00	0.66	10.00	0.40						

DATE: 25 SEP 85

ATTENUATION COEFFICIENT: .63

TIME: 0843 HOURS

R**2: .9894

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	57.83	1.00	34.49	2.00	12.17	3.00	7.91
4.00	4.57	5.00	2.43	6.00	1.42	7.00	0.76	8.00	0.45
9.00	0.26	10.00	0.14						

LAKE 629 1983

DATE: 06 JUN 83

ATTENUATION COEFFICIENT: .66

TIME: 0820 HOURS

R**2: .9986

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.74	1.00	41.61	2.00	21.42	3.00	10.52
4.00	5.45	5.00	2.69	6.00	1.49	7.00	0.79	8.00	0.39
9.00	0.22	10.00	0.12						

DATE: 04 JUL 83

ATTENUATION COEFFICIENT: .55

TIME: 0825 HOURS

R**2: .9912

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	51.14	1.00	31.72	2.00	17.37	3.00	10.15
4.00	6.34	5.00	4.27	6.00	2.52	7.00	1.49	8.00	0.86
9.00	0.49	10.00	0.28						

DATE: 29 JUL 83

ATTENUATION COEFFICIENT: .60

TIME: 0950 HOURS

R**2: .9973

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	64.84	1.00	45.39	2.00	23.77	3.00	13.23
4.00	7.78	5.00	3.59	6.00	1.95	7.00	1.18	8.00	0.65
9.00	0.41	10.00	0.24						

DATE: 29 AUG 83

ATTENUATION COEFFICIENT: .57

TIME: 0815 HOURS

R**2: .9965

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.96	1.00	37.52	2.00	19.71	3.00	12.30
4.00	7.65	5.00	4.48	6.00	2.52	7.00	1.39	8.00	0.79
9.00	0.44	10.00	0.24						

DATE: 03 OCT 83

ATTENUATION COEFFICIENT: .52

TIME: 0830 HOURS

R**2: .9878

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	55.50	1.00	27.24	2.00	17.91	3.00	11.60
4.00	7.11	5.00	4.52	6.00	2.83	7.00	1.70	8.00	1.05
9.00	0.66	10.00	0.35						

LAKE 629 1984

DATE: 22 MAY 84

ATTENUATION COEFFICIENT: .59

TIME: 0918 HOURS

R**2: .9980

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.95	1.00	45.32	2.00	23.96	3.00	12.59
4.00	7.27	5.00	4.17	6.00	2.30	7.00	1.29	8.00	0.73
9.00	0.44	10.00	0.26						

DATE: 19 JUN 84

ATTENUATION COEFFICIENT: .51

TIME: 0810 HOURS

R**2: .9938

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	58.43	1.00	37.95	2.00	19.88	3.00	12.29
4.00	7.11	5.00	4.46	6.00	2.77	7.00	1.81	8.00	1.14
9.00	0.70	10.00	0.42	11.00	0.24	12.00	0.17		

DATE: 17 JUL 84

ATTENUATION COEFFICIENT: .54

TIME: 0835 HOURS

R**2: .9974

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	65.20	1.00	46.00	2.00	24.00	3.00	13.60
4.00	8.24	5.00	4.72	6.00	2.72	7.00	1.60	8.00	1.02
9.00	0.58	10.00	0.34	11.00	0.22	12.00	0.14		

DATE: 14 AUG 84

ATTENUATION COEFFICIENT: .55

TIME: 0840 HOURS

R**2: .9978

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	63.58	1.00	44.53	2.00	25.47	3.00	14.62
4.00	9.43	5.00	5.75	6.00	3.02	7.00	1.60	8.00	0.99
9.00	0.62	10.00	0.38						

DATE: 12 SEP 84

ATTENUATION COEFFICIENT: .50

TIME: 0835 HOURS

R**2: .9923

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	56.43	1.00	35.71	2.00	20.71	3.00	13.57
4.00	8.57	5.00	5.50	6.00	3.50	7.00	2.21	8.00	1.36
9.00	0.81	10.00	0.51						

DATE: 15 OCT 84

ATTENUATION COEFFICIENT: .46

TIME: 0944 HOURS

R**2: .9975

DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.	DEPTH	% SURF.
0.00	100.00	0.50	62.69	1.00	45.84	2.00	27.82	3.00	18.02
4.00	11.75	5.00	7.80	6.00	4.98	7.00	3.17	8.00	2.02
9.00	1.33	10.00	0.86	11.00	0.53	12.00	0.30		

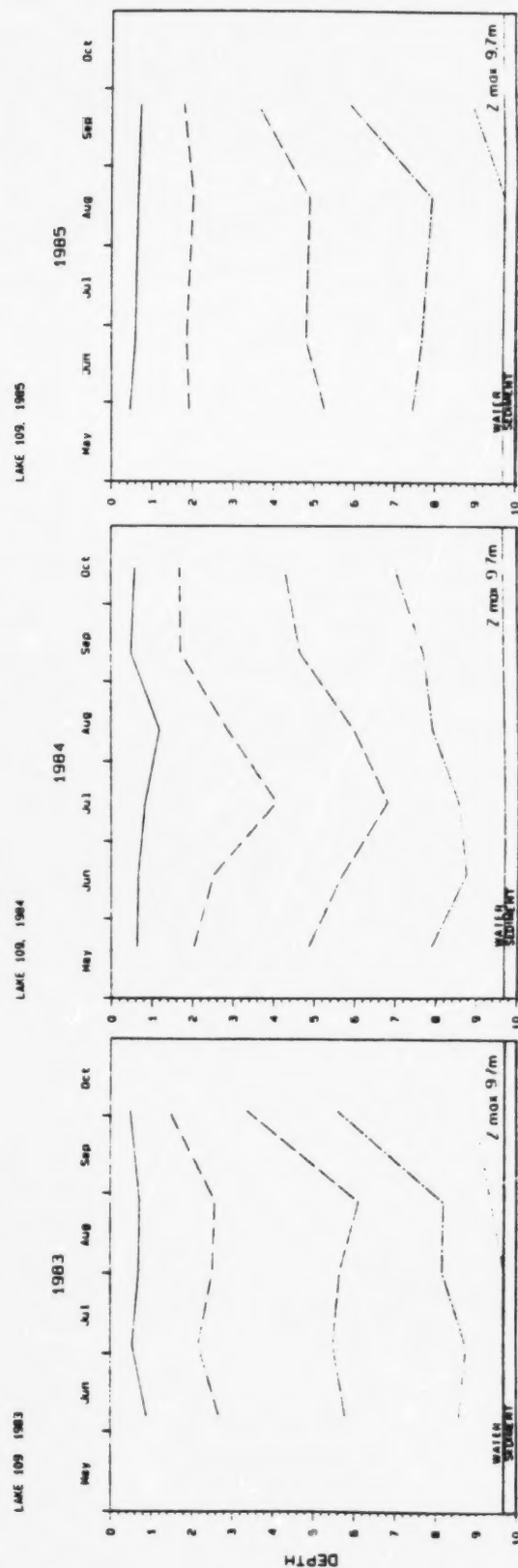
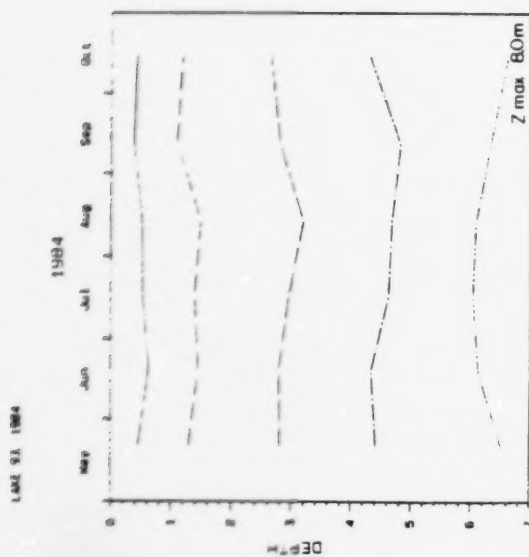
APPENDIX 2

This appendix presents the data as depth-time isopleths of light for each lake for each year. The depth values for 60, 30, 10, 3, and 0.5 percent of surface light are calculated from Appendix 1 data and plotted over time for each year. Zero depth would be 100 percent light in each lake.

In some lakes at the profiling station (e.g. Lake 114) the light is not totally attenuated before reaching the sediments ($Z_{\max}$). The $Z_{\max}$ for each lake is shown on each panel. A line is drawn where more than 0.5% of surface light reaches the sediments.

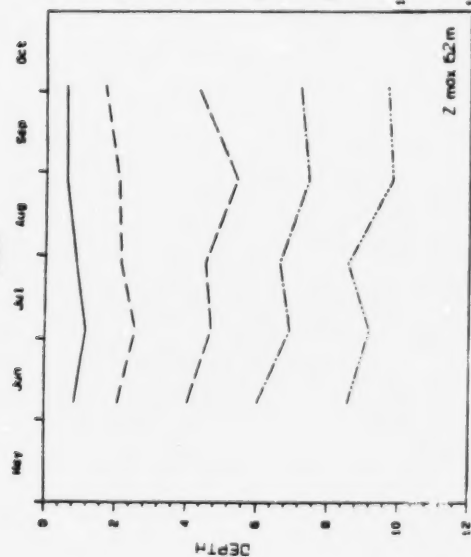
The 60, 30, 10, 3, and 0.5 percent light isopleths are not calculated from the mean attenuation coefficient; i.e. the negative slope of the regression of the profile as described in Appendix 1. Rather, the depth intercept for each distinct percent light value is derived from the slope between the two measured light-depth data points immediately above and below that desired percent light value. Where $Z_{\max}$ is reached before the light is completely attenuated, the last two light-depth data points are used for the slope determination.

Because of weather or other logistical problems, some of the light isopleth panels are missing monthly or biweekly data points. Some discretion should be used when interpolating these data although the data points are interconnected on the plots (e.g. Lake 374, 1985).



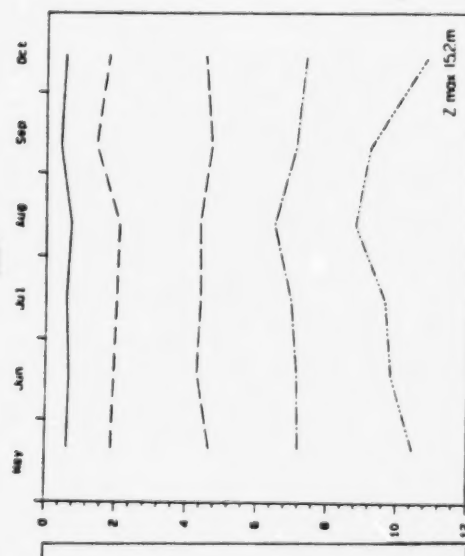
LAKE 110, 1983

1983



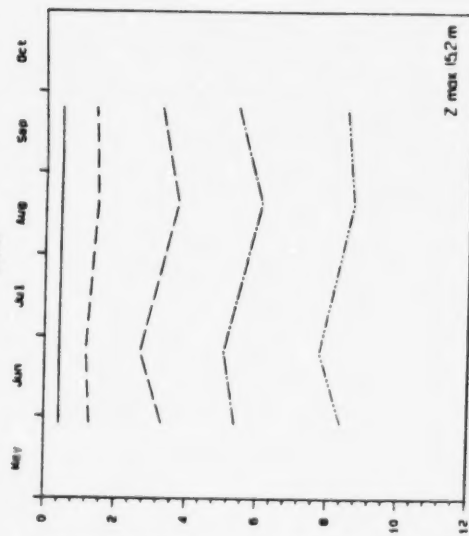
LAKE 110, 1984

1984



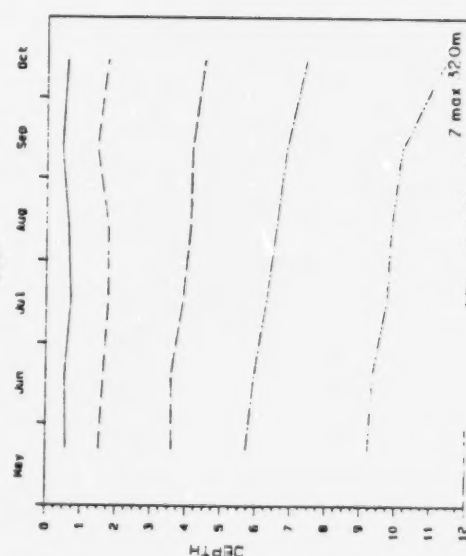
LAKE 110, 1985

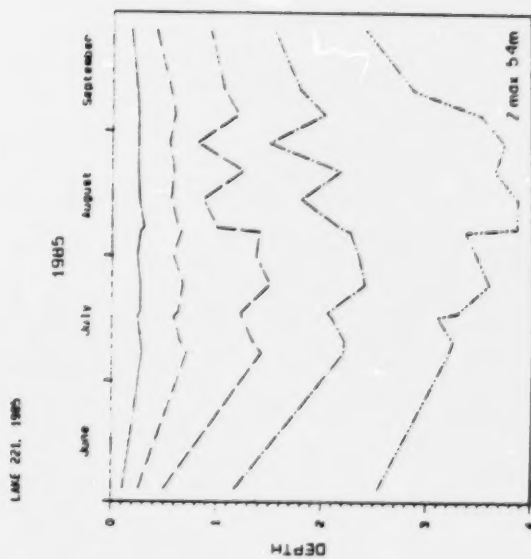
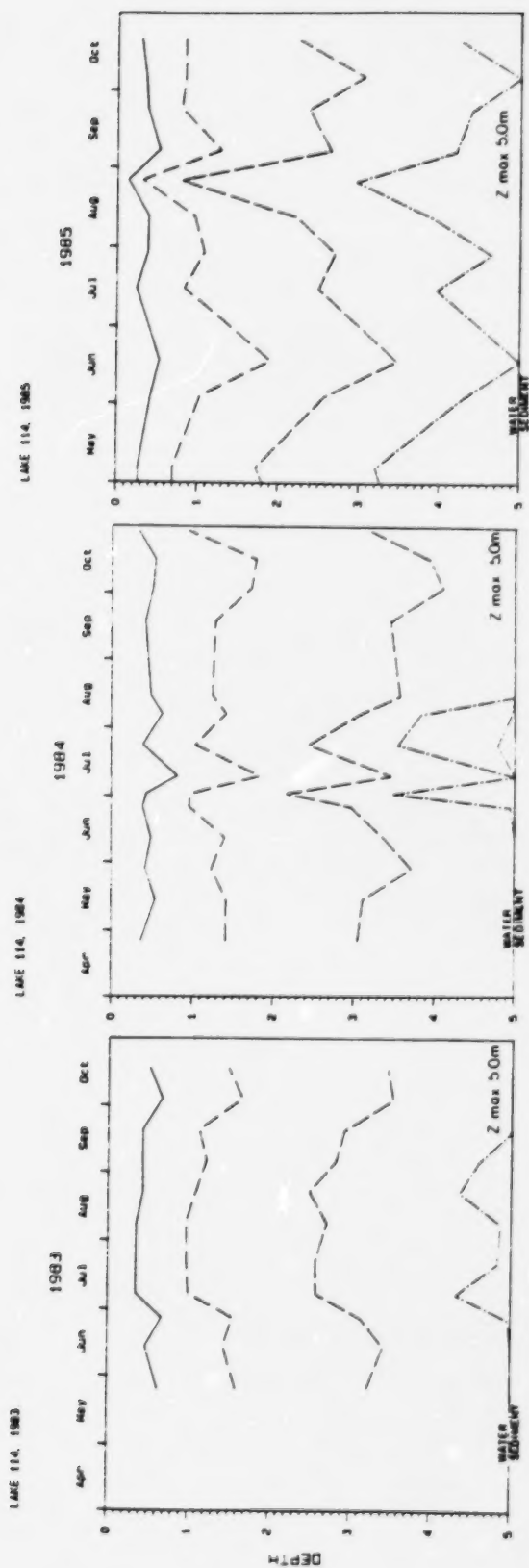
1985



LAKE 111, 1984

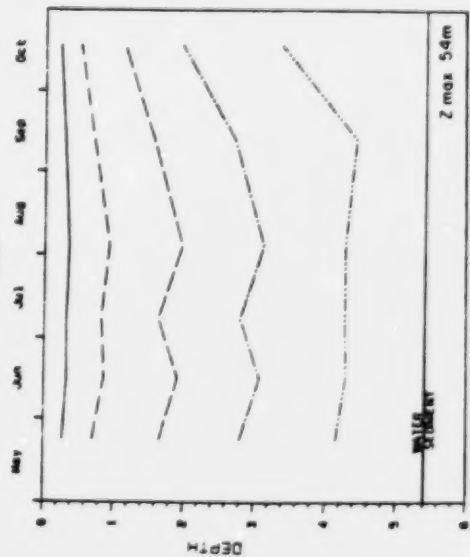
1984





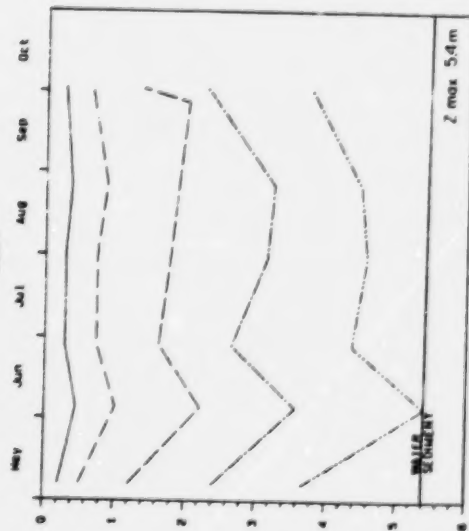
LAME 222, 1983

1983



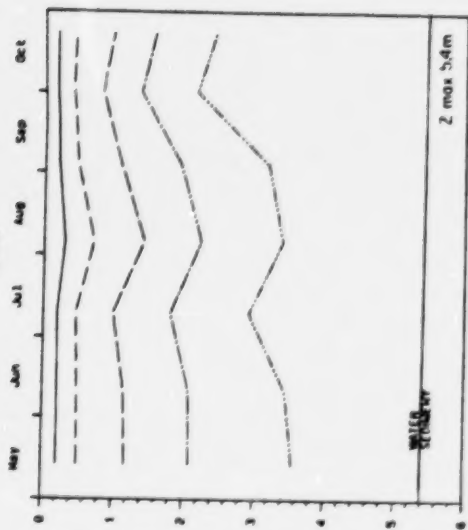
LAME 222, 1984

1984



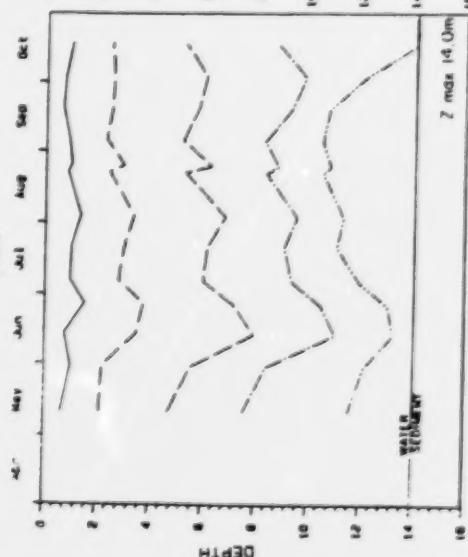
LAME 222, 1985

1985



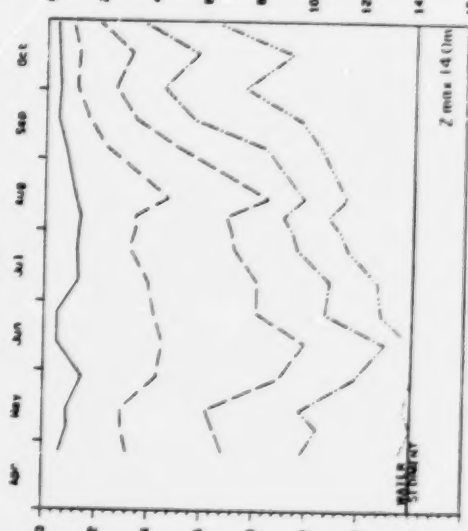
LAME 223, 1983

1983



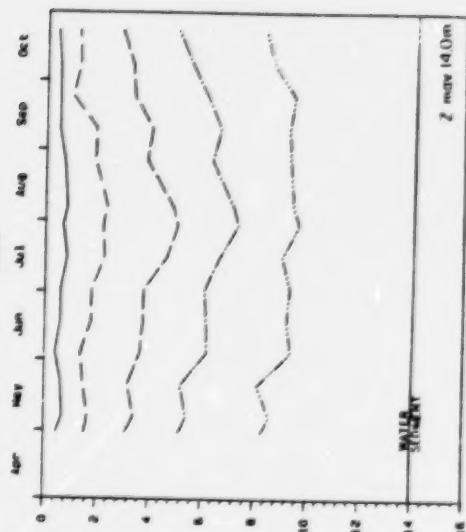
LAME 223, 1984

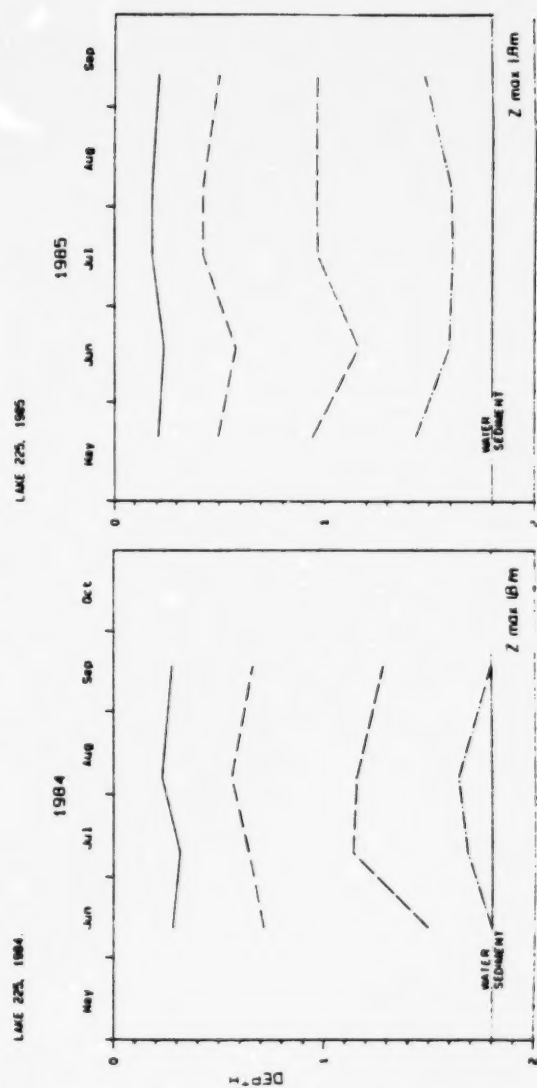
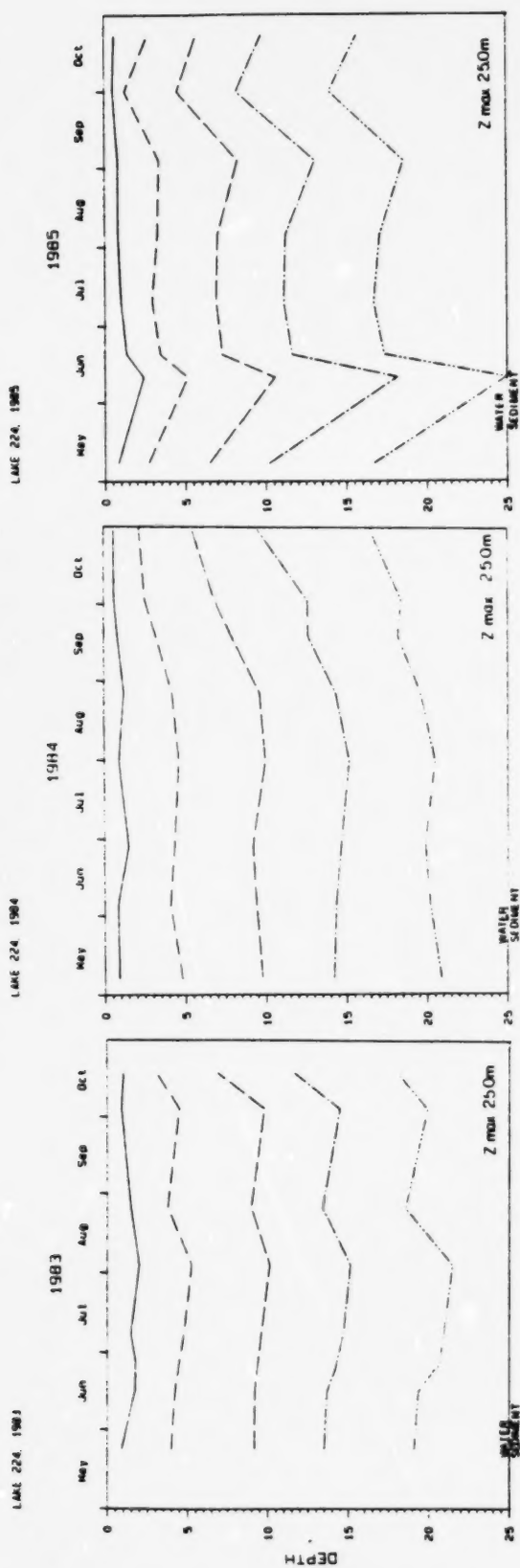
1984

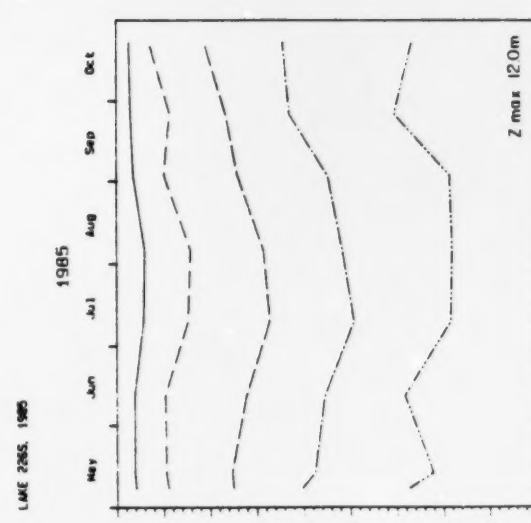
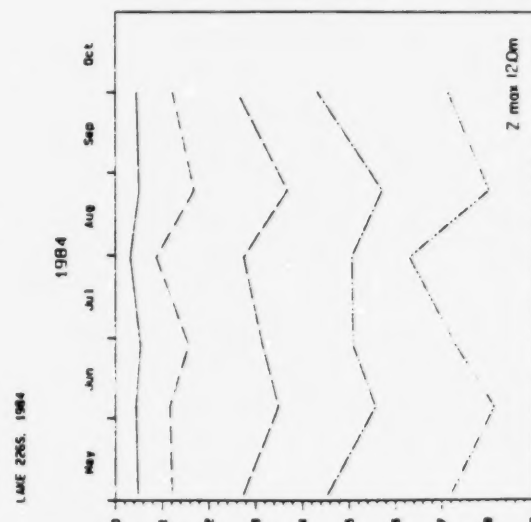
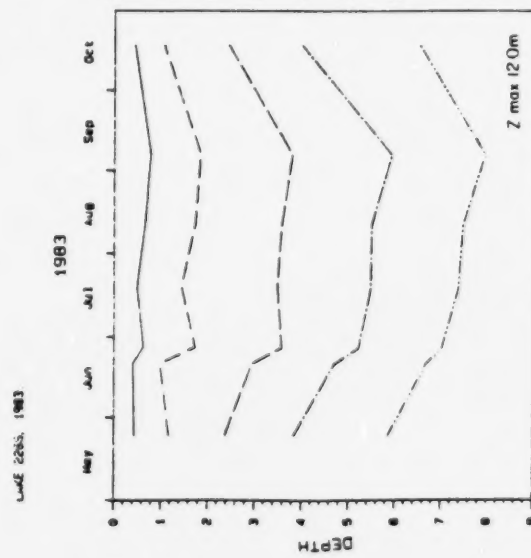
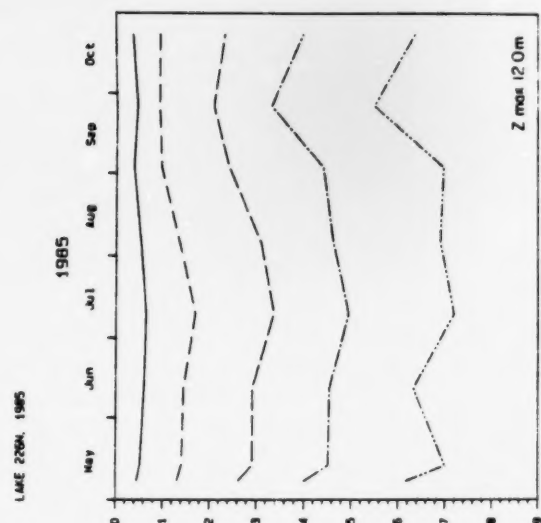
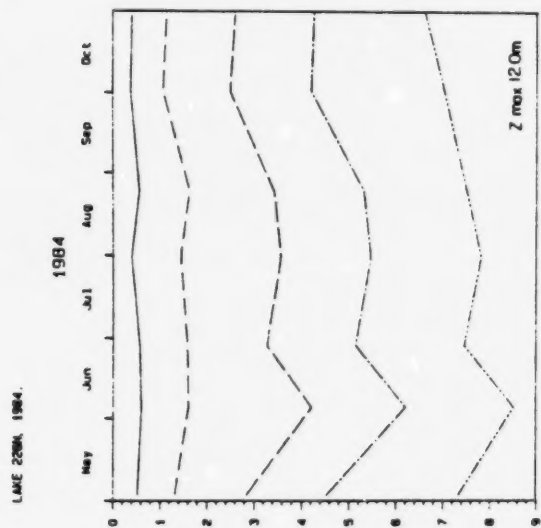
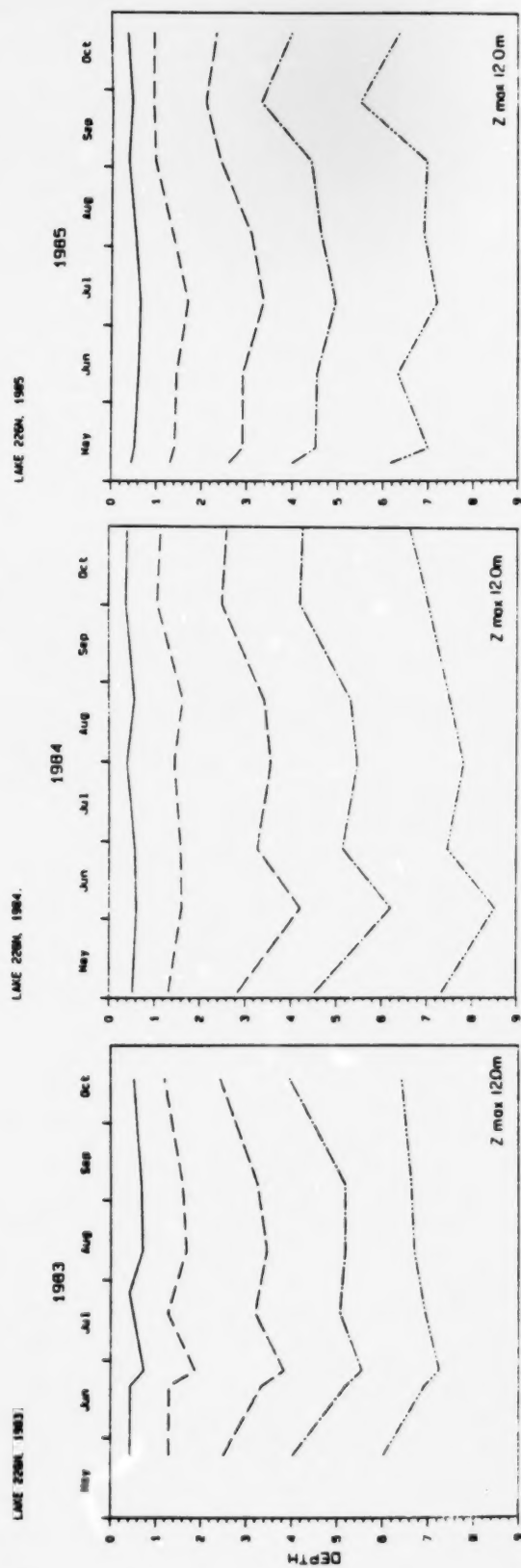


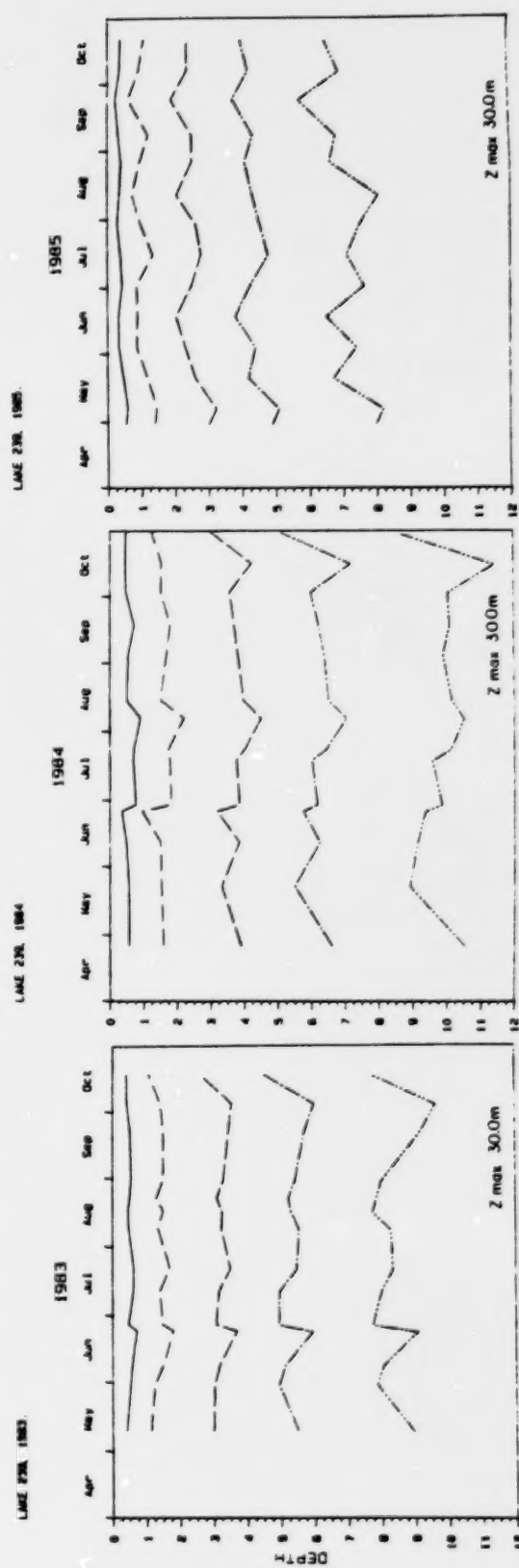
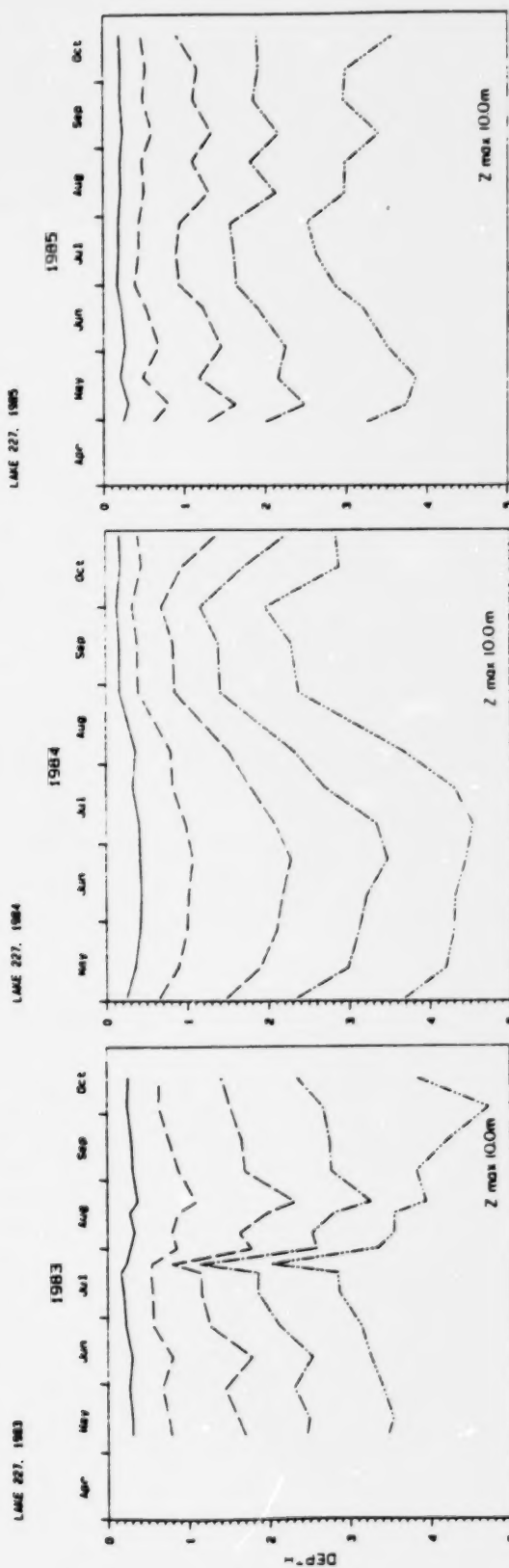
LAME 223, 1985

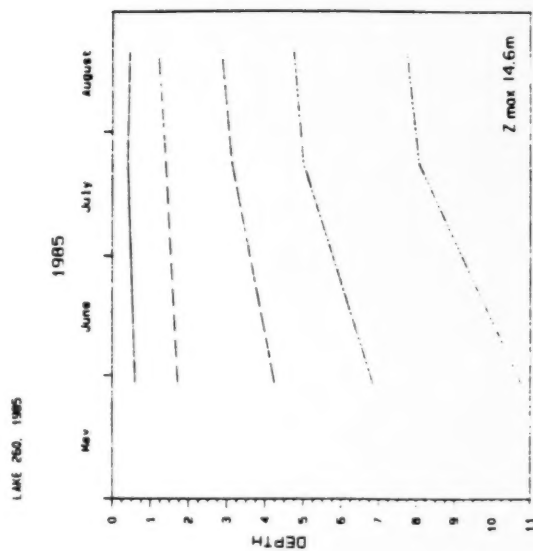
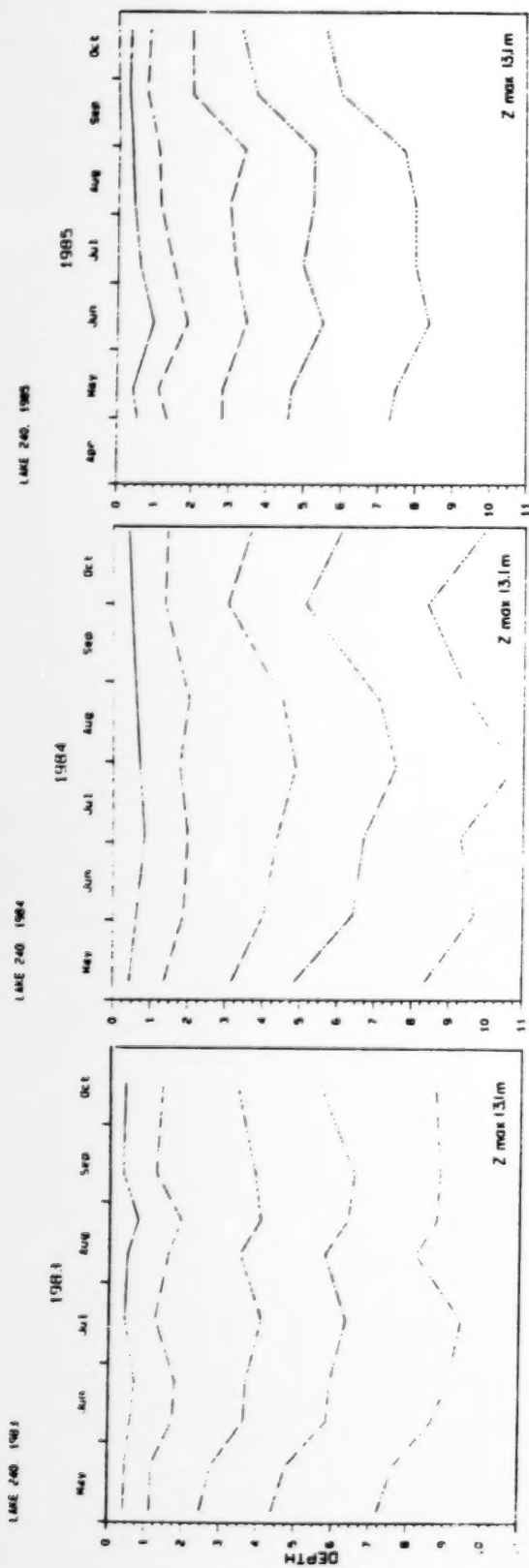
1985

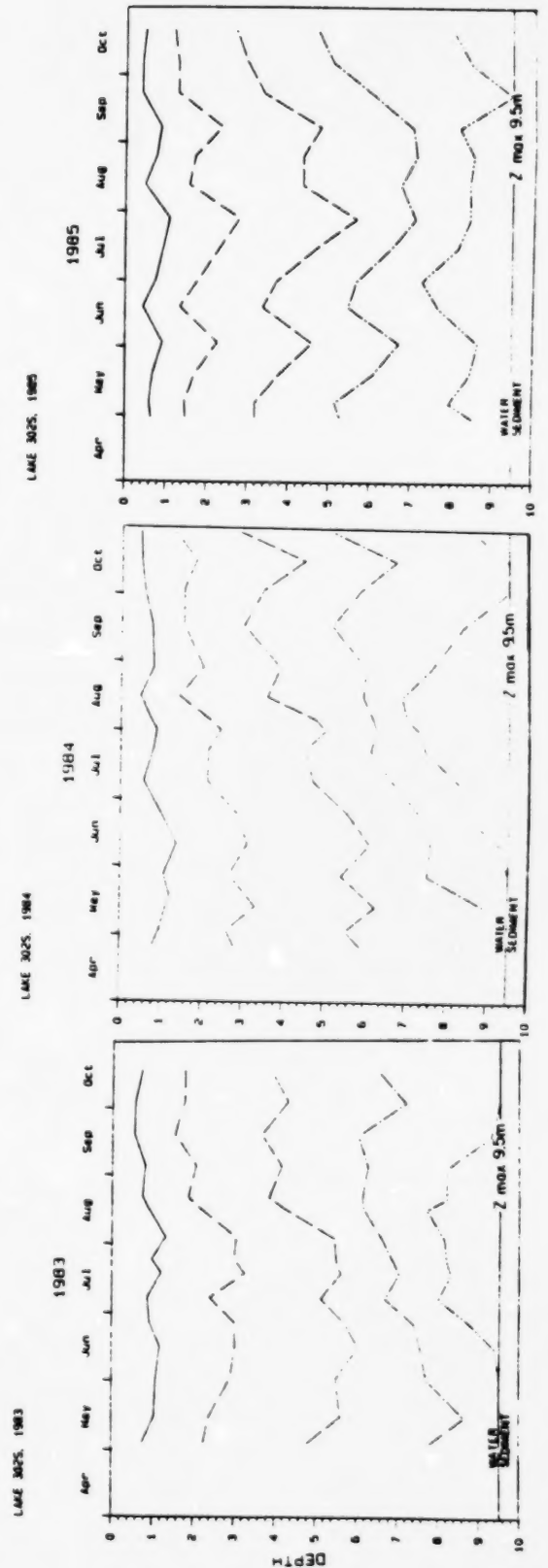
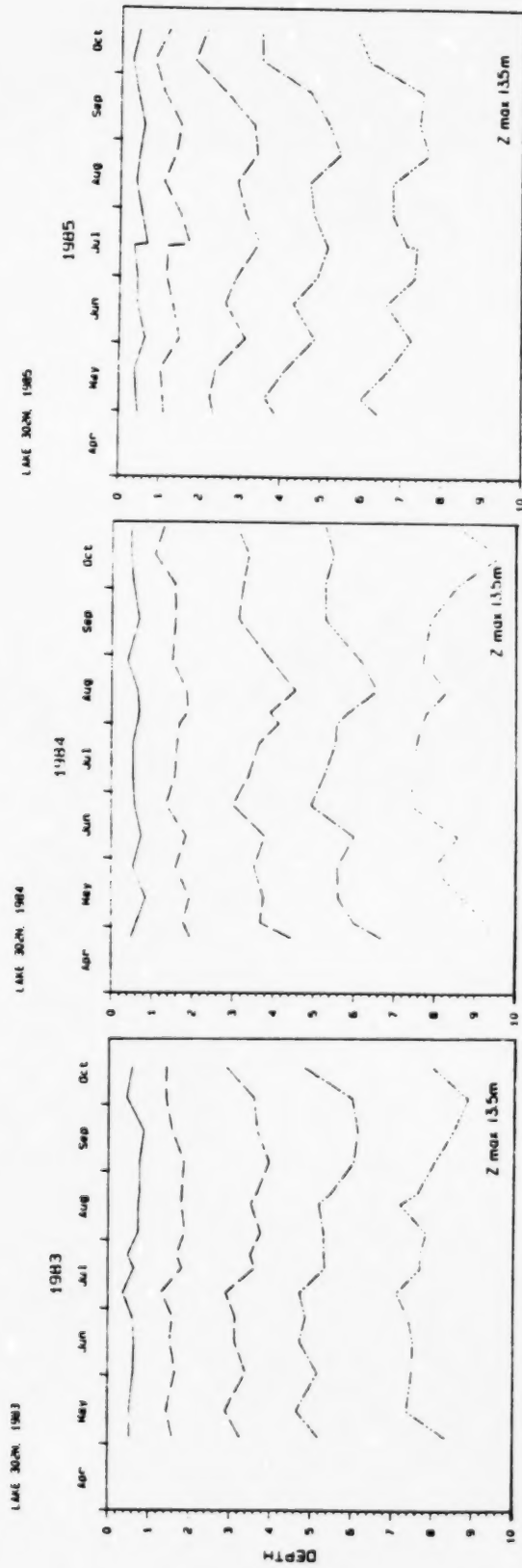


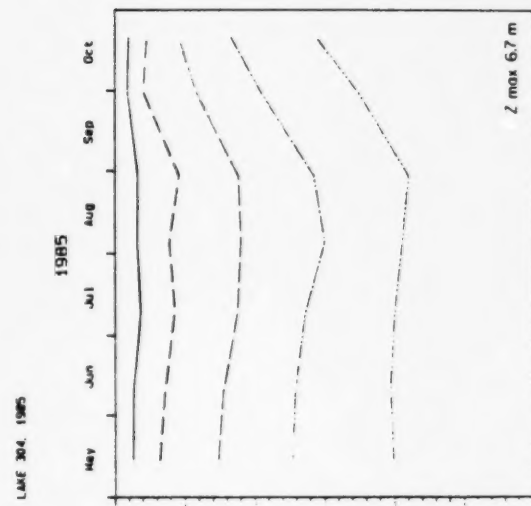
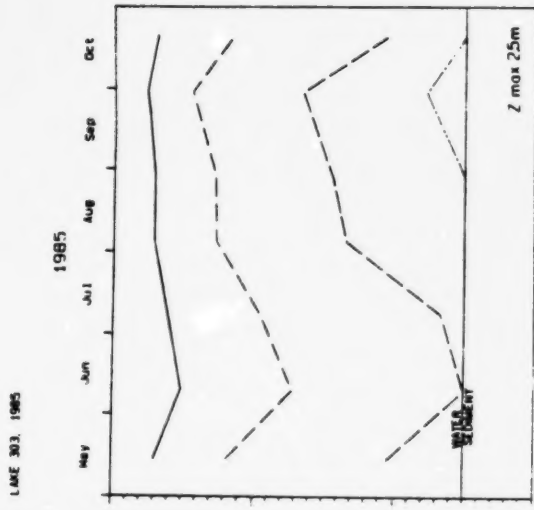
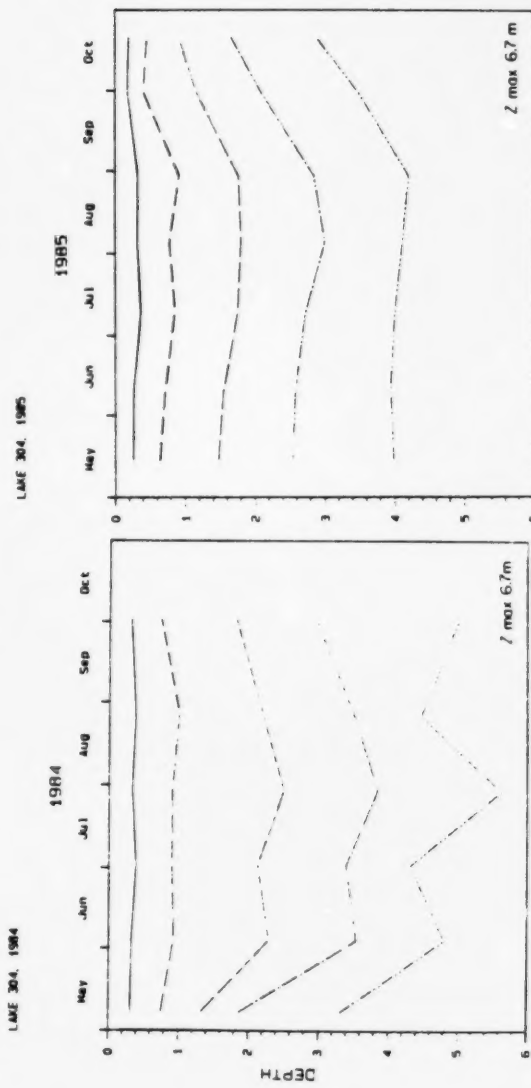
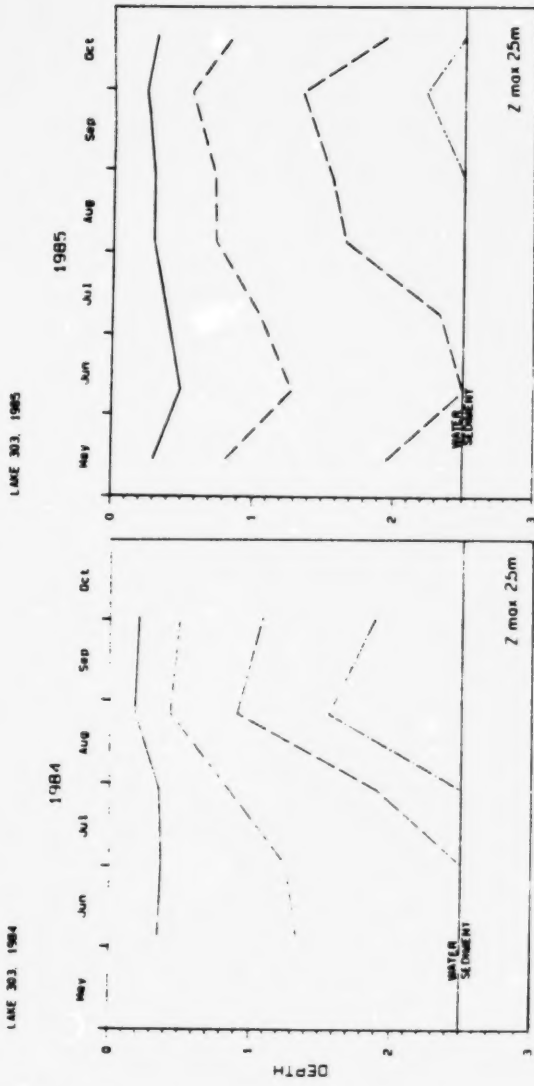


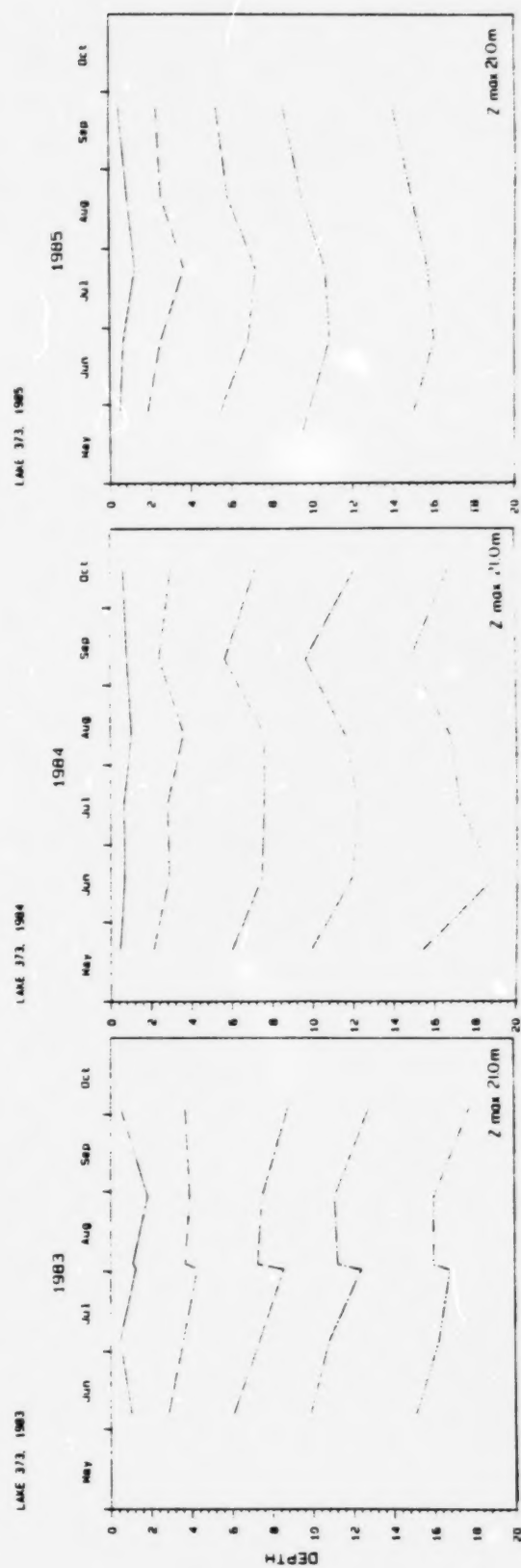
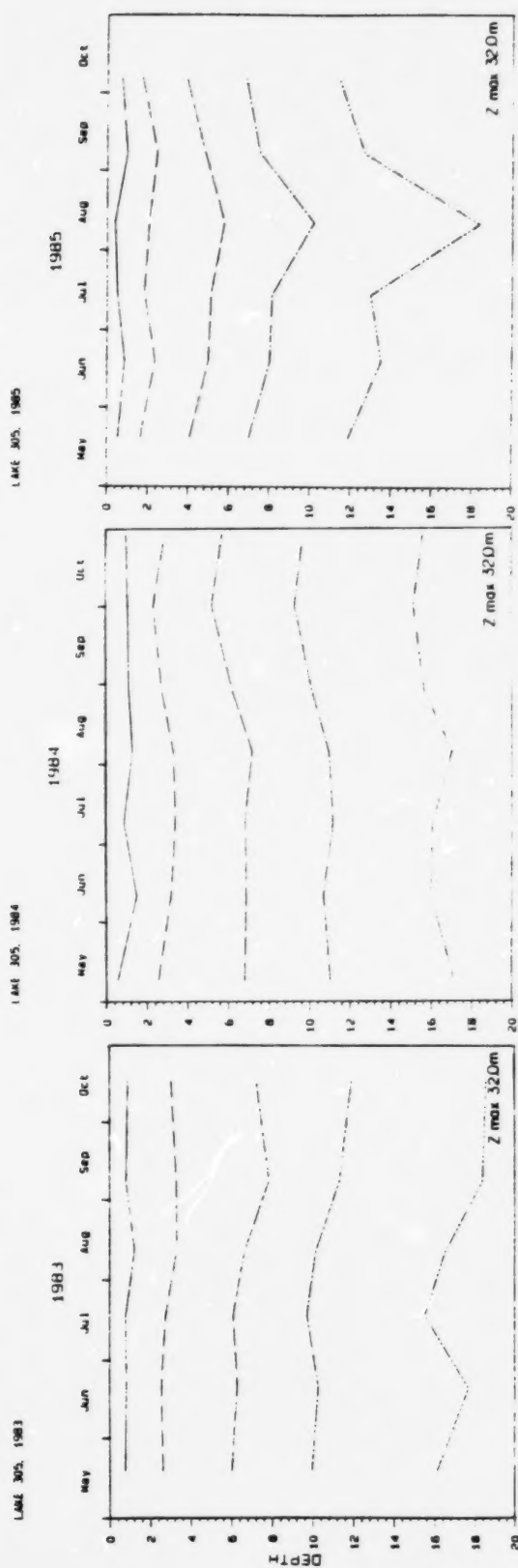




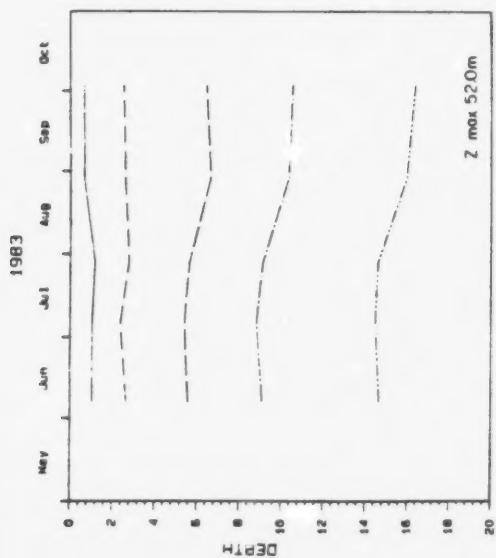




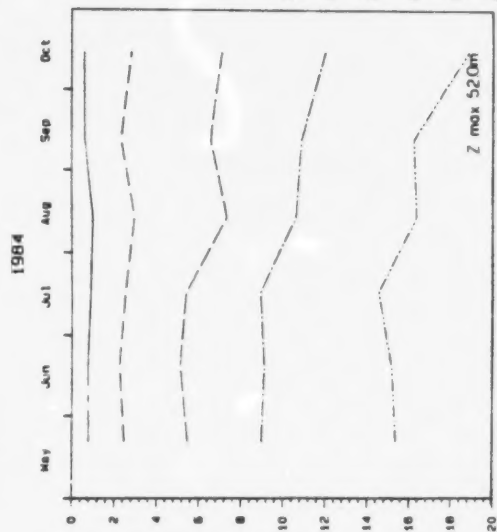




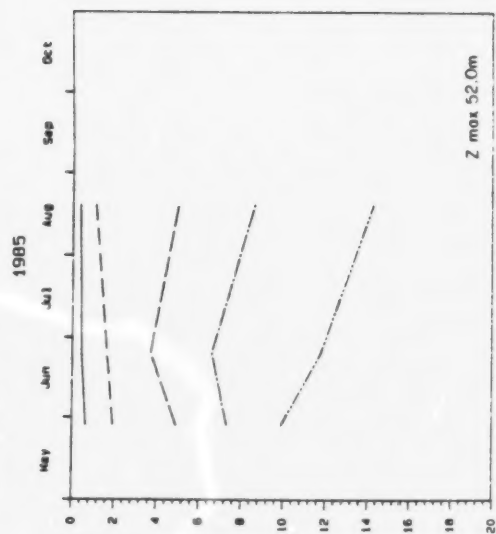
LAKE 374, 1983



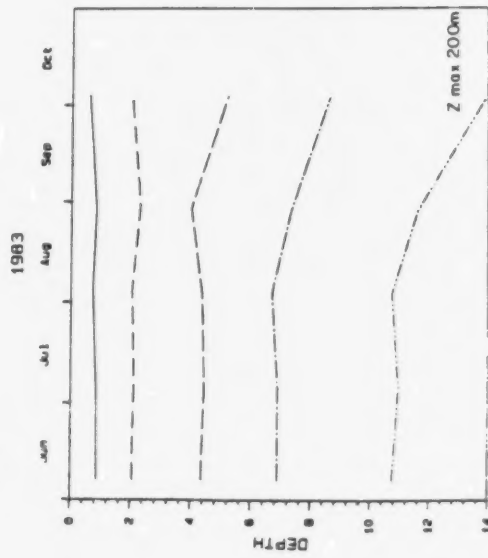
LAKE 374, 1984

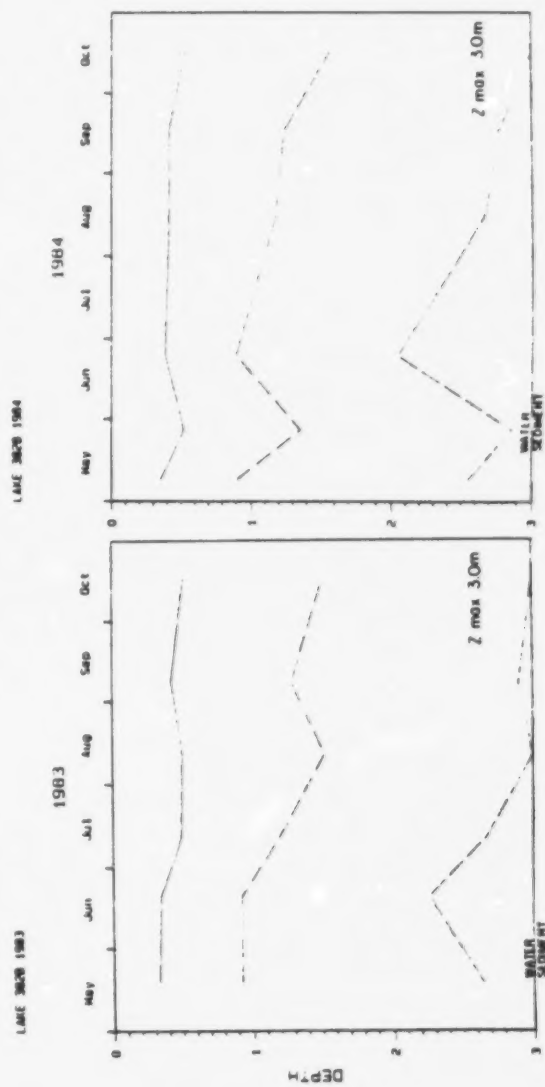
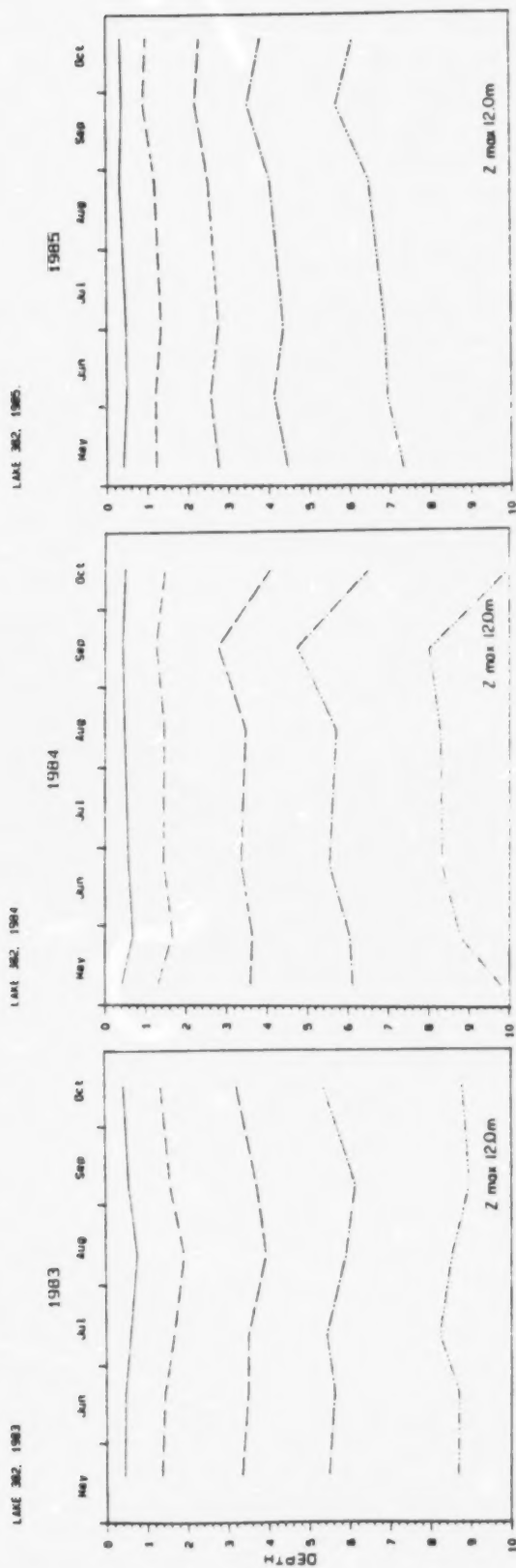


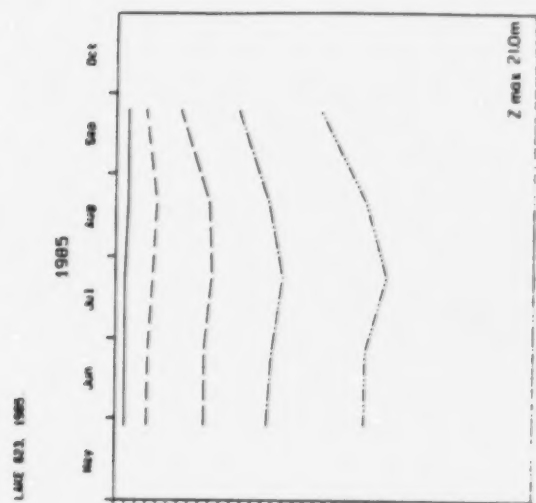
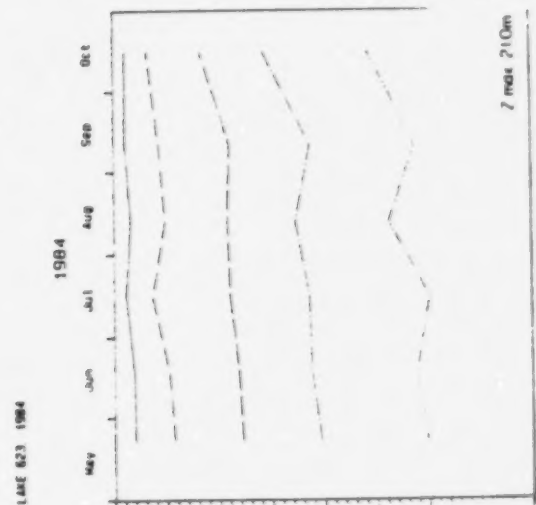
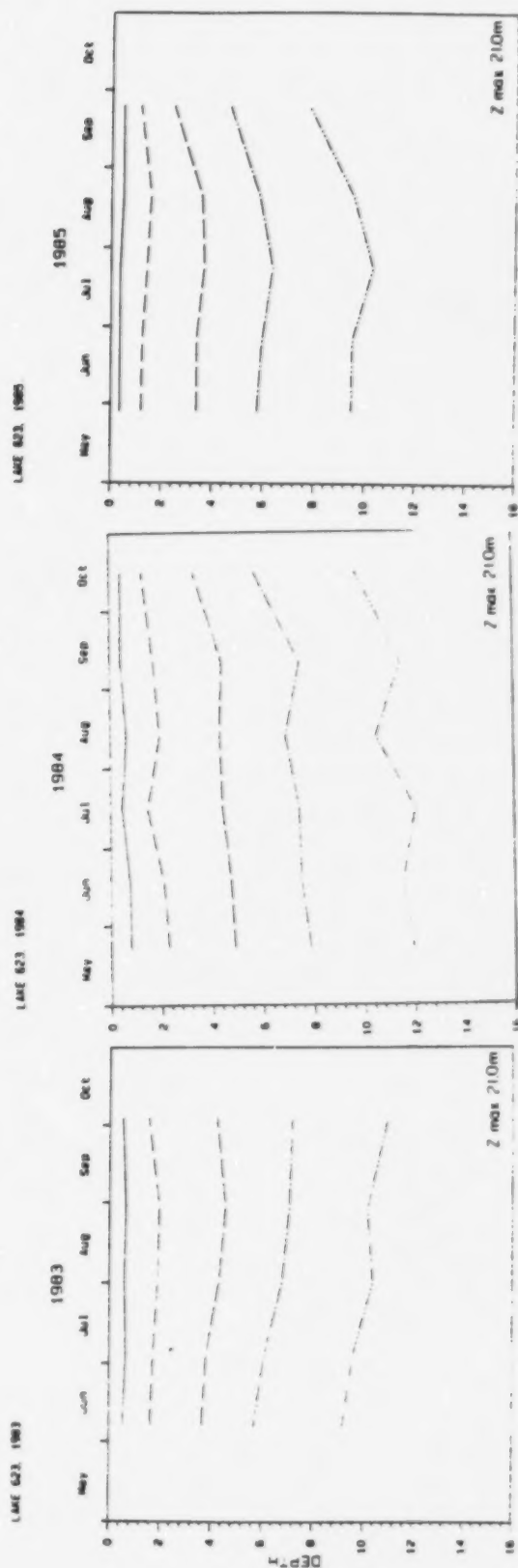
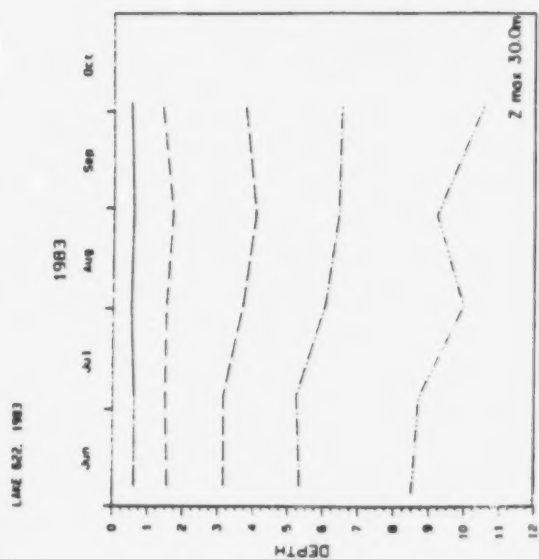
LAKE 374, 1985

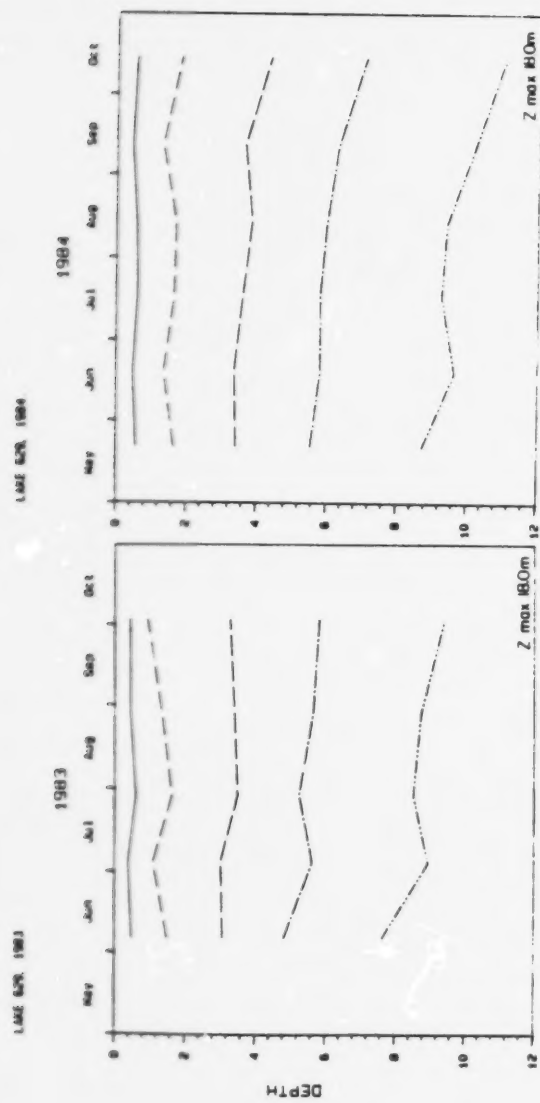


LAKE 375, 1983









APPENDIX 3

This appendix lists previous data or technical reports on light attenuation in selected lakes at the Experimental Lakes Area.

- SHEARER, J.A. 1976. Light extinction measurements in the Experimental Lakes Area - 1974 data. Can. Fish. Mar. Serv. Tech. Rep. 615: v + 79 p.
- SHEARER, J.A., and D.R. DeCLERCO. 1976. Light extinction measurements in the Experimental Lakes Area - 1975 data. Can. Fish. Mar. Serv. Tech. Rep. 646: v + 113 p.
- SHEARER, J.A., and D.R. DeCLERCO. 1977. Light extinction measurements in the Experimental Lakes Area - 1976 data. Can. Fish. Mar. Serv. Data Rep. 33: v + 103 p.
- SHEARER, J.A., and D.R. DeCLERCO. 1978. Light extinction measurements in the Experimental Lakes Area - 1977 data. Can. Fish. Mar. Serv. Data Rep. 73: iv + 49 p.
- SHEARER, J.A., and D.R. DeCLERCO. 1979. Light extinction measurements in the Experimental Lakes Area - 1978 data. Can. Fish. Mar. Serv. Data Rep. 121: iv + 59 p.
- SHEARER, J.A., and D.R. DeCLERCO. 1980. Light extinction measurements in the Experimental Lakes Area - 1979 data. Can. Data Rep. Fish. Aquat. Sci. 189: iv + 63 p.
- SHEARER, J.A., and E.R. DeBRUYN. 1981. Light attenuation in the Experimental Lakes Area - 1980 data. Can. Data Rep. Fish. Aquat. Sci. 259: iv + 50 p.
- SHEARER, J.A., and E.R. DeBRUYN. 1982. Light attenuation in the Experimental Lakes Area - 1981 data. Can. Data Rep. Fish. Aquat. Sci. 337: iv + 51 p.
- SHEARER, J.A., and E.R. DeBRUYN. 1983. Light attenuation in the Experimental Lakes Area - 1982 data. Can. Data Rep. Fish. Aquat. Sci. 411: iv + 63 p.